



ECONOMIC IMPACT ANALYSIS:



ONTARIO FOOD AND BEVERAGE PROCESSING SECTOR

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Prepared By:



September 4, 2012

Alliance of Ontario Food Processors
850 Fountain Street South
Cambridge, Ontario
N3H 0A8

Dear Steve Peters,

Re: Economic Impact Analysis of Ontario's Food and Beverage Processing Sector

MNP is pleased to provide the Alliance of Ontario Food Processors (AOFP) with our Final Report on the above project.

The report contains an analysis of the Ontario food and beverage processing sector and its economic contributions including:

- A definition of the sector.
- A profile of the sector as a whole and by subsector.
- An analysis of past, current and future sector trends.
- Benchmarking with two other major manufacturing sectors.
- Economic impacts and benefits.
- Identification of data sources.

We would like to acknowledge and thank all interview respondents and the following industry representatives and organizations for their support, expertise, insights and guidance:

- Steve Peters, Executive Director at the AOFP.
- The AOFP Board of Directors.
- Ontario Ministry of Agriculture, Food and Rural Affairs.
- Statistics Canada.

Sincerely,

MNP LLP

1. EXECUTIVE SUMMARY

In this report, MNP examined the impacts of Ontario's food and beverage processing sector and its associated value chain. The key findings are displayed on the first three pages of the executive summary.

Table A below summarizes the profile of the Ontario food and beverage manufacturing sector as a whole.

Table A. Food and Beverage Manufacturing Statistics¹

| FOOD AND BEVERAGE MANUFACTURING | |
|--|--------------|
| | (\$'000) |
| Total revenue | \$38,761,270 |
| Value of shipments ² | \$34,818,734 |
| Manufacturing value-added ³ | \$12,912,900 |
| Total expenses | \$33,965,971 |
| Total wages and salaries ⁴ | \$5,385,978 |
| Exports | \$6,809,634 |
| Imports | \$11,730,935 |
| | |
| Total number of employees ⁵ | 126,946 |
| Number of establishments | 2,899 |

Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010.
 Industry Canada, International Trade Data, 2010.
 Statistics Canada, Input-Output Model.

¹ Please note that Statistics Canada does not report beverage statistics on their own. To protect the confidentiality of Ontario tobacco producers, beverage and tobacco statistics are aggregated. MNP's analysis separated beverage statistics using a set of assumptions that were verified with industry experts. For more information on the assumptions made, please see Appendix D.

² Please note that value of shipments refers to revenues from goods manufactured only whereas total revenues include other non-manufacturing factors present (e.g. sale of equipment, distribution business, sales of assets, etc.)

³ Manufacturing value-added is the value of manufacturing revenues plus net change in the inventory of goods in process and finished goods, less the costs of materials and supplies and of the energy, water and vehicle fuel used.

⁴ For more information on the employment, wages and salaries data and related assumptions please see Appendix D.

⁵ Ibid



Economic Impact Analysis

The economic impacts of the food and beverage processors are summarized in Table B below.

Table B. Ontario Food and Beverage Sector Impacts

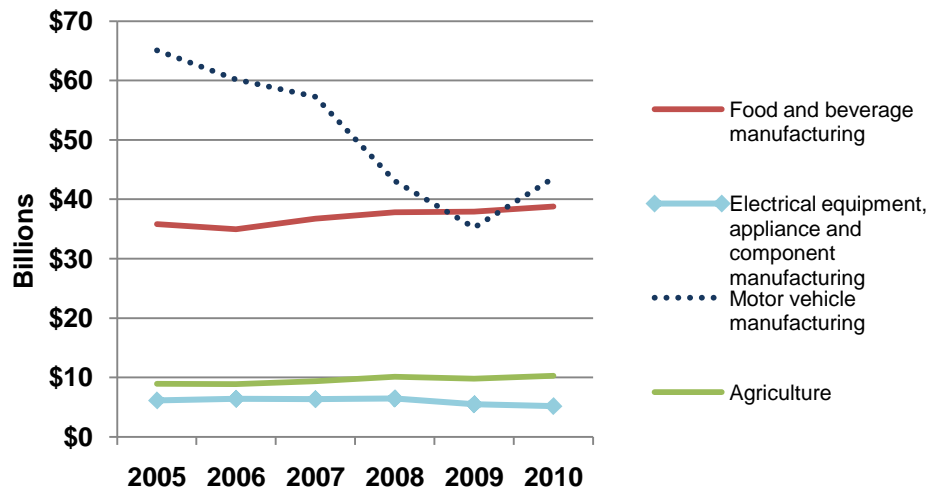
| | Output ('000) | GDP ('000) | Employment (FTEs) | Federal Tax ('000) | Provincial Tax ('000) | Municipal Tax ('000) |
|----------------------|---------------------|---------------------|-------------------|--------------------|-----------------------|----------------------|
| Direct | \$38,761,270 | \$12,080,623 | 126,946 | \$1,368,965 | \$858,332 | \$78,116 |
| Indirect and Induced | \$28,062,163 | \$14,136,593 | 234,080 | \$1,669,001 | \$1,036,797 | \$188,622 |
| Total | \$66,823,433 | \$26,217,217 | 361,026 | \$3,037,966 | \$1,895,129 | \$266,738 |

Benchmarking Analysis

MNP compared the food and beverage processing sector to “motor vehicle manufacturing”, “electrical equipment appliance and component manufacturing” and “agriculture sector.”

As shown in Figure A below, while comparator manufacturing sectors’ revenue decreased over the last five years (2005 to 2010), the Ontario food and beverage sector and the agriculture sector experienced growth. Food and beverage processing was therefore more recession resistant than the comparator manufacturing sectors.

Figure A. Total Revenues by Sector (2005-2010)

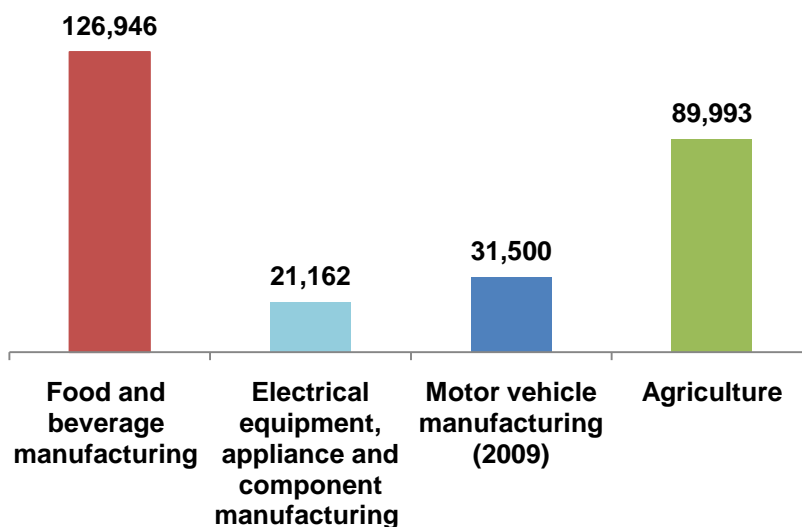


Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2005-2010
Statistics Canada, Total Farm Cash Receipts, 2005-2010⁶

⁶ Please note that all inter-farm sales within the province are excluded from total farm cash receipts estimates.

As shown in Figure B below, the food and beverage processing sector was the largest of all comparator sectors in terms of employment.

Figure B. Direct Employment by Sector⁷



Source: Statistics Canada, Input Output Model
Automotive Communities Partnership, Automotive Industry Update: Opportunities Abound, 2009⁸

⁷ Please note that the employment estimates for the food and beverage processing sector, the electrical equipment, appliance and component manufacturing sector and the agriculture sector were derived using a Statistics Canada Input-Output Model. For information on employment data and related assumptions please refer to Appendix D.

⁸ According to the Automotive Communities Partnership study, in 2009, the motor vehicle manufacturing sector in Ontario generated 31,500 direct employees. MNP used the Automotive Communities Partnership direct employment estimates to benchmark Ontario's food and beverage processing sector. For more information on employment data and related assumptions please refer to Appendix D.



PROFILE OF THE FOOD AND BEVERAGE PROCESSING SECTOR

The sector value chain includes the flow of production of agricultural products from the farm gate, through manufacturing, marketing and sales, to distribution activities that result in food and beverage products that are ready for consumption through retail, wholesale and other channels.

The food and beverage processing sector is a critical contributor to Ontario's provincial economy. According to Statistics Canada, Annual Survey of Manufacturers and Logging 2010 and MNP's analyses outlined in this report:

- Food and beverage processing is a \$39 billion sector, with over 120,000 direct jobs and close to \$7 billion in exports.⁹ Food and beverage processing accounts for 15% of Ontario's total manufacturing revenues of 258 billion (in 2010).
- In 2010, the food and beverage manufacturing sector was the second largest manufacturing sector in terms of value of shipments and employment in Ontario.
- Ontario is the 3rd largest food cluster in North America.¹⁰
- Food and beverage processing is the first customer to farmers, with Ontario-based food processors buying about 65% of food-related farm production in the province.¹¹
- The Ontario food and beverage sector's total revenue and value of shipments grew 8% from 2005 to 2010, even with the occurrence of the 2009 recession. Other major Ontario manufacturing sectors, such as electrical equipment, appliance and component manufacturing and motor vehicle manufacturing, saw significant revenue decreases during that same five year period.
- The food and beverage processing sector and its impacts are distributed throughout Ontario's different regions, and the sector therefore impacts the province as a whole. There are close to 3,000 food and beverage processing businesses in the province, of which many are located in rural communities.
- The food and beverage processing sector is developing, new, high quality products that improve the health and wellbeing of consumers.

For profiles of the 10 food and beverage processing subsectors, please see Appendix A.

⁹ Total sector revenues are about \$39 billion and value of shipments is close to \$35 billion.

¹⁰ Measuring Agriculture's Economic Footprint in Ontario. Food and Farming Canada. October 2010.

<http://www.foodandfarmingcanada.com/2010/10/14/measuring-agricultures-economic-footprint-in-ontario>.

¹¹ Ontario Ministry of Agriculture, Food and Rural Affairs estimate.



ECONOMIC IMPACT ANALYSIS

Economic impacts of the sector arise from direct expenditures on goods and services (e.g. operating supplies, professional services, etc.), the employment of support staff and the generation of tax revenues. MNP estimated economic impacts using relevant statistical methodologies and economic multipliers. MNP found the following:

- **Total direct, indirect and induced output generated by food and beverage processors in the Ontario economy is estimated to be \$67 billion.** Direct output is estimated to be \$39 billion. Direct output supports a further \$23 billion in indirect and \$5 billion in induced impacts.
- **Total direct, indirect and induced nominal GDP generated by food and beverage processors in the Ontario economy is estimated to be \$26 billion.** Direct nominal GDP is estimated to be \$12 billion. Direct GDP supports a further \$10 billion in indirect impacts and \$4 billion in induced impacts.
- **Approximately 361,026 direct, indirect and induced full-time equivalent positions (FTEs) are generated by food and beverage processors in the Ontario economy,** including about 127 thousand in direct, 167 thousand in indirect and 67 thousand in induced FTEs. This employment supports close to \$13 billion in wages and salaries, including over \$5 billion in direct, over \$5 billion in indirect and \$2 billion in induced wages and salaries.¹²
- **Finally, MNP estimated that food and beverage processing generated close to \$5 billion in direct, indirect and induced taxation revenue** including \$3 billion, \$2 billion and \$267 million in revenues to the federal, provincial and municipal governments respectively.¹³

BENCHMARKING ANALYSIS

MNP compared the food and beverage processing sector to the following major manufacturing sectors and subsectors in Ontario:

- Electrical equipment, appliance and component manufacturing (NAICS sector 335).
- Motor vehicle manufacturing (NAICS subsector 3361; subsector of transportation equipment manufacturing).

For total revenues and employment, MNP also compared the food and beverage processing sector to the agriculture sector in Ontario.

¹² For more information on the employment data and related assumptions please see Appendix D.

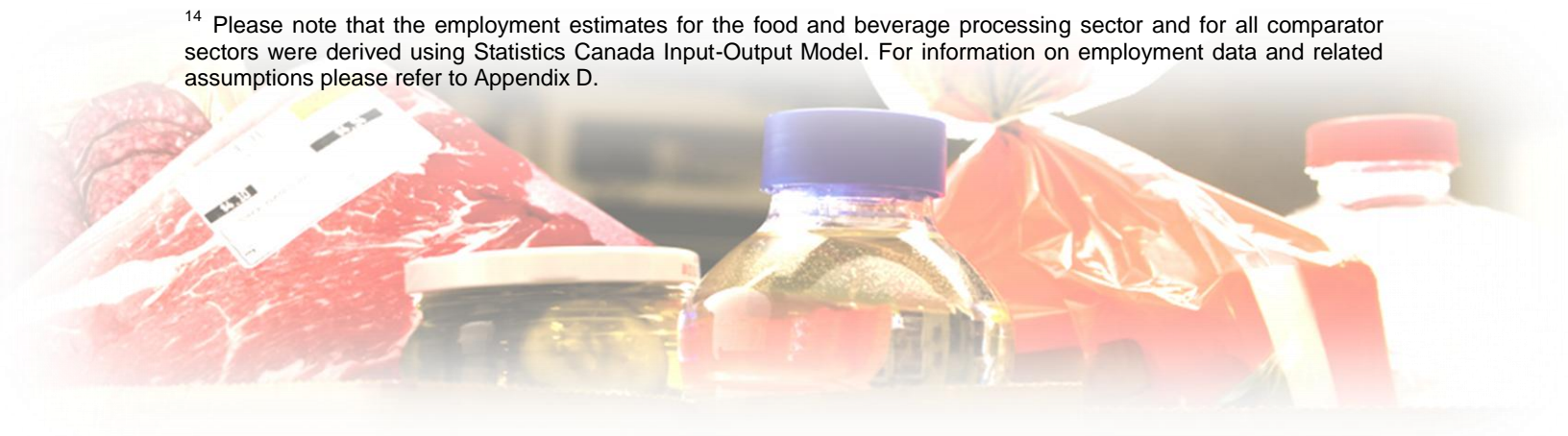
¹³ Please note that because tax revenues can change regularly due to modifications in tax policy, the tax revenue impacts in this report are estimates only and subject to change. They should be viewed as approximate in nature.



Our **benchmarking analysis** showed that in 2010:

- The food and beverage processing sector was the largest of all comparator sectors in terms of employment.¹⁴
- The food and beverage processing sector was the second largest of all manufacturing sectors in terms of value of shipments and total revenues in Ontario.
- The food and beverage manufacturing sector's expenses, imports and exports surpassed the electrical equipment, appliance and component manufacturing sector. The motor vehicle manufacturing subsector, on the other hand, was larger than food and beverage processing in terms of expenses, imports and exports.
- While comparator manufacturing sectors' revenue decreased over the last five years (2005 to 2010), the Ontario food and beverage sector and agriculture sector experienced growth. Food and beverage processing was therefore more recession resistant than the comparator manufacturing sectors and subsectors.

¹⁴ Please note that the employment estimates for the food and beverage processing sector and for all comparator sectors were derived using Statistics Canada Input-Output Model. For information on employment data and related assumptions please refer to Appendix D.



TREND ANALYSIS

The **key historic trends** in the food and beverage processing sector based on Statistics Canada, Annual Survey of Manufacturers and Logging 2010 and MNP's analyses are as follows:

- Food and beverage manufacturing generally experienced increases over the last five years (2005 to 2010) in terms of value of shipments, revenues, expenses and exports with some slow downs around 2006 and 2007. Revenue and value of shipments growth is shown in the figures on the next page.
- Food and beverage manufacturing imports have also grown over the last five years and at a faster pace than exports.
- With sector consolidation, the number of food and beverage manufacturing establishments decreased over the last five years (a 2% decrease from 2005 to 2010).

Figure C. Ontario Food and Beverage Revenues, 2005 to 2010

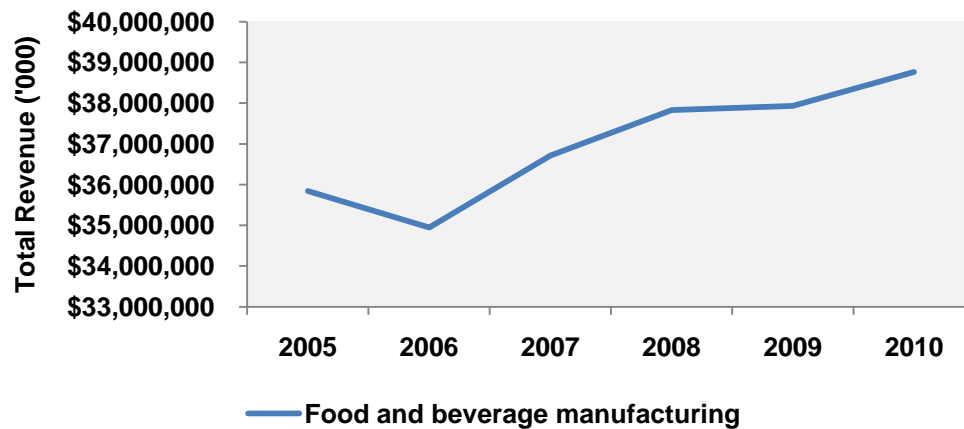
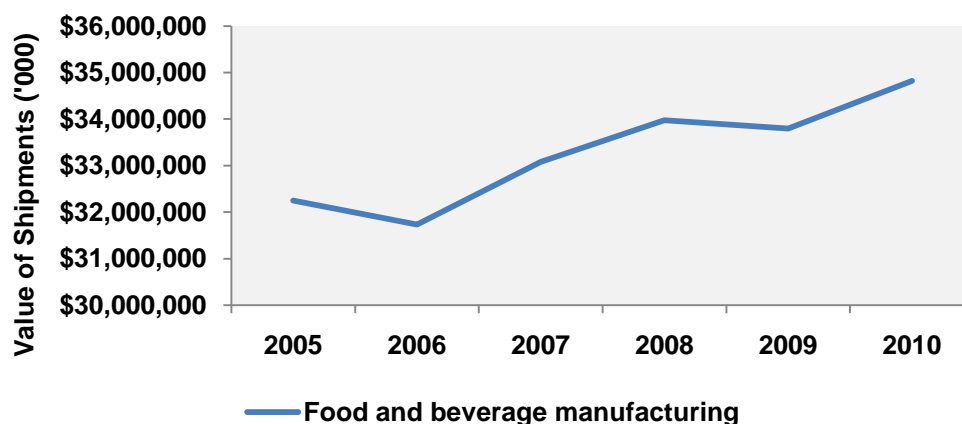


Figure D. Ontario Food and Beverage Value of Shipments, 2005 to 2010



Our trend research concluded that:

- Even with the economic downturn, the Ontario agri-food processing sector has experienced growth over the last five years. For example, total revenues, value of shipments and expenses grew by about 2% a year from 2005 to 2010.
- Ontario's food and beverage sector has significant strengths which support sector success today and will continue to do so in the future. Examples of factors contributing to success include Ontario's proximity to national and international markets, significant trade infrastructures and diverse production of agricultural commodities in the province.
- Ontario's population is projected to experience healthy growth over the next 26 years, rising over 34%, or close to 5 million, from an estimated 13 million on July 1, 2010 to close to 18 million by July 1, 2036. The annual rate of growth of Ontario's population is projected to slow gradually over the projection period, starting at 1.2% in 2010 to 2011 and moderating to 1.0% by 2035 to 2036.¹⁵

Based on these findings, it is likely that the Ontario food and beverage processing sector will continue growing its exports, revenues and expenses at an average of about 1 to 3% annually over the next five years. Due to industry consolidation, the number of establishments may continue to decrease slightly and the number of employees may remain fairly stable.

¹⁵ Ontario Population Projections Update. Ontario Ministry of Finance. Spring 2011.



ECONOMIC AND SOCIAL BENEFITS

The Ontario food and beverage processing sector also generates economic and social benefits. MNP investigated such benefits using interviews with Ontario municipalities, asking them how food and beverage processors have impacted the fabric of their communities. MNP also reviewed relevant literature and articles.

This section of the report is not meant to quantify economic and social benefits, but instead to provide context and specific examples of the sector's contributions to local economies and communities.

Economic benefits stemming from the Ontario food and beverage processing sector include:

- **Attraction of New Businesses and Residents.** Most municipalities surveyed by MNP indicated that food and beverage processing contributes to the attraction of new businesses to their community and other communities throughout the province. Representatives surveyed by MNP indicated that residents are attracted to communities as a result of employment opportunities in the food and beverage processing sector.
- **Area Revitalization and Infrastructure Development.** The majority of municipalities surveyed by MNP indicated that food and beverage processing has contributed to local development, infrastructure development and area revitalization. Heinz, for example, donated land in Leamington for the development of an arena. The Heinz Arena is the home of the Jr. B Leamington Flyers and has bowl seating for 1,500 with theatre style seats and an Olympic size ice surface. In London, the John Labatt Centre (JLC), a sports-entertainment centre, opened its doors in 2002. The JLC was named after John Labatt, the founder of the Labatt brewery in London. The JLC was built, in part, to be the new downtown home of London's Ontario Hockey League team, the London Knights.
- **Opportunities for Employment and Training Programs.** Almost all of the municipalities surveyed by MNP indicated that the food and beverage manufacturing sector creates opportunities for unemployed workers, trainees and interns, generating opportunities for employment within the communities they live. Ontario has a number of training and educational programs to encourage youth and others to enter the food and beverage manufacturing industry. For example, the University of Guelph, Department of Food Science offers diverse and highly rated educational programs, including a Distance Education Certificate; Short Courses in Dairy, Wheat and Meat Processing; and Undergraduate and Graduate programs.
- **Creation of Partnerships.** The food and beverage processing sector in Ontario has a long history of collaborating with various organizations. Almost all of the municipalities surveyed by MNP indicated that partnership opportunities are generated through food and beverage manufacturing. Educational institutions often form partnerships with government, community agencies and the private sector to better understand emerging issues and trends affecting the food and beverage processing sector in Ontario. Partnerships are also often formed between food and beverage processors and other private enterprises to help drive competitiveness. In 2009, Dainty Foods collaborated with JMP Engineering to introduce a line of rice products which cut consumer cooking time by more than half without compromising flavour or nutritional value.



and without changing ingredients. The ensuing success of the products enabled Dainty Foods to increase its staff by 15% and expand sales.¹⁶

- Development of Technology and Innovation.** The majority of municipalities surveyed by MNP agree that the Ontario food and beverage processing sector contributes in the area of innovation and technological improvements. For example, food and beverage processing companies have been innovative with respect to packaging development. After four years of research, Frito Lay Canada introduced the world's first 100% compostable chip bag. The bag is made primarily of plant-based material called polylactic acid that completely breaks down when composted, leaving no waste.¹⁷ The Guelph Food Technology Centre (GFTC) assists food companies and food entrepreneurs to improve their competitiveness and profitability by helping them develop new products and design new processes. The GFTC has gained the reputation as one of North America's leading research and consulting facilities.¹⁸ Also, programs and organizations exist to encourage the development and application of new and innovative technologies. For example, The Institute of Food Processing Technology (IFPT) at Conestoga College, created in 2009 in partnership with AOFP, has the objective to develop a highly skilled workforce by providing training and educational programs that meet the needs of the food and beverage manufacturing sector. The IFPT is Ontario's first and only engineering and technology centre focused on providing leading edge training in a variety of areas including food safety, food processing techniques, electronic instrumentation techniques, automation, robotics, packaging and plant supervision. The IFPT trains students to be prepared for jobs in state of the art food and beverage manufacturing facilities with the latest technology in robotics and automation.¹⁹
- Benefits for Farming Communities.** Food and beverage processing has obvious benefits for the Ontario farming community and vice versa. Food and beverage processing is the first customer to farmers, with Ontario-based food processors buying about 65% of food-related farm production in the province. In this way, food and beverage processors support and partially enable the economic activity and impacts generated by the Ontario farming industry.

Social and community benefits of the Ontario food and beverage processing sector include:

- Community Involvement and Volunteerism.** All of the municipalities surveyed by MNP indicated that social contributions are generated through the activities of Ontario food and beverage processors in their communities. Some examples of community involvement include: donating products and providing funding to local organizations (e.g. United Way, food banks, etc.), supporting local sports teams, contributing to scholarship programs, providing support for school programs (e.g. nutrition programs) and providing volunteers for community events. Grand River Foods, located in the Cambridge region, is well known for giving back to the community.

¹⁶ Dainty Foods Adding Workers. The Windsor Star. January 2009.

<http://www.windsorstar.com/health/Dainty+Foods+adding+workers/1210361/story.html>.

¹⁷ TheRecord.com. <http://catch21.ca/printArticle/678346>

¹⁸ Key Industry Sector: Food and Beverage. Toronto.com. <http://www.toronto.ca/invest-in-toronto/food.htm>.

¹⁹ The Institute of Food Processing Technology. <http://www.ifpt.ca/aboutus.jsp>



The company supports a number of initiatives, including United Way and food banks. In 2009, Grand River Foods donated more than \$40,000 worth of chicken products to the local food banks. The company is a supporter of youth programs and provides financial assistance to the Boys and Girls Clubs in the communities within which they operate to help advance their efforts. In addition, Grand River Foods supports the Junior Achievements' national program which encourages and develops entrepreneurialism and business leadership amongst youth.

- Promotion of Healthy Living.** Almost all of the municipalities surveyed by MNP believe processing operations have contributed to increased appreciation for healthy living through healthy food choices for residents. Representatives surveyed cited several examples of ways in which processors in their communities have taken measures to reformulate processed foods in ways that make them healthier while at the same time remain appealing to consumers. Voortman Cookies of Burlington has been producing quality cookies since 1951. In 2004, Voortman Cookies was the first major cookie company to remove Trans Fat from all of their products, without compromising on taste.²⁰ Kellogg's Canada's commitment to healthy eating is also evidenced by its commitment to the nutrition literacy of Canadians. In 2010, Kellogg's Canada announced its support of the Nutrition Facts Education Campaign (NFEC), an innovative collaboration of Health Canada and Food and Consumer Products of Canada (FCPC). The objective of the campaign is to enable Canadians to understand and use the Nutrition Facts table on packaged foods and make informed choices.²¹
- Promotion of Local and Sustainable Farm Production.** The majority of representatives surveyed by MNP indicated that processing operations contribute to an increase in or retention of local sustainable farm production. There are many examples of food and beverage processing companies sourcing products locally and sustainably. Heinz, for instance, works to incorporate local farm inputs into its processed products. The plant in Leamington uses only locally grown tomatoes for production. The Heinz plant in Leamington is important for local farmers; during the busy season, about 150 to 175 loads (or 6,000 tons) of locally grown tomatoes are supplied to the plant each day.²² From Farm to Table Canada is a manufacturer of popcorn that is also devoted to the promotion of locally grown foods. The factory is located less than 100 kilometres from its growers. Farm to Table Canada works closely with the corn growers to ensure growers conserve energy and cut greenhouse gas emissions, protect and enhance wildlife habitats, employ sustainable production systems and ensure safe and fair conditions.

²⁰ Operating a Distributorship. Voortman Cookies.

<http://www.voortman.com/careers/images/Voortman%20Distributorship%20Brochure1.pdf>.

²¹ Kellogg's Strengthens Commitment to Nutrition Literacy of Canadians, Announces Support of Nutrition Facts Education Campaign. Kellogg's. <http://www.newswire.ca/en/story/615239/kellogg-strengthens-commitment-to-nutrition-literacy-of-canadians-announces-support-of-nutrition-facts-education-campaign>.

²² After 100 years, Heinz Plant Looks to the Future. Windsor Star. September 2009. <http://www2.canada.com/windsorstar/news/story.html?id=6451590e-24c7-4021-b69b-6b26e23488b1>.



2. GLOSSARY OF ECONOMIC TERMS

| Term | Definition |
|-------------------------------|---|
| Direct Impacts | <ul style="list-style-type: none"> Direct impacts are the economic impacts of a sector that are due to changes to front end businesses that receive operating revenue as a direct consequence of a sector. Direct impacts are related to original purchases or “direct sales” from primary suppliers. <i>Example: In the case of food and beverage processing, direct impacts are related to the spending that processors make when purchasing goods and services from their suppliers, for example, purchasing grain and vegetables from Ontario producers. Processors’ spending also supports a certain number of jobs and generates a share of the personal income of the employees of these primary suppliers.</i> |
| Export Intensity | <ul style="list-style-type: none"> Export intensity is defined as domestic exports divided by manufacturing shipments. The more an industry is export oriented, the higher this ratio. |
| Exports | <ul style="list-style-type: none"> Exports include all goods leaving the country (through customs) for a foreign destination. |
| FTE | <ul style="list-style-type: none"> FTE means full-time equivalent employee. |
| GDP | <ul style="list-style-type: none"> GDP is the “value added” to the economy (the unduplicated total value of goods and services). |
| Government Tax Revenue | <ul style="list-style-type: none"> Government tax revenue is the total amount of tax revenues generated for different levels of government including municipal, provincial and federal taxes. |
| Import Intensity | <ul style="list-style-type: none"> Import intensity is defined as the ratio of imports to manufacturing revenues minus exports plus imports multiplied by 100. The more an industry is import oriented, the higher this ratio. |
| Imports | <ul style="list-style-type: none"> Imports include all goods which have entered the country (Canada) by crossing territorial (customs) boundaries, whether for immediate domestic consumption or for storage in customs bonded warehouses. |



| Term | Definition |
|----------------------------------|--|
| Indirect Impacts | <ul style="list-style-type: none"> Indirect impacts are due to changes in the activity of a sector's suppliers. Indirect impacts include the spending that food and beverage processors' suppliers make when purchasing goods and services from their own suppliers (i.e. secondary suppliers) in order to meet the demand generated by the food and beverage processing sector. <i>Example: When food and beverage processors spend money on agricultural products, producers in turn purchase inputs such as feed, seed and machinery to meet demand. This spending by producers reflects the indirect impacts of food and beverage processing spending on agricultural commodities. Ontario food and beverage processing spending also supports a certain number of jobs and generates a share of the personal income of the employees of these secondary suppliers.</i> |
| Induced Impacts | <ul style="list-style-type: none"> Induced impacts are due to shifts in spending on goods and services as a consequence of the payroll of the directly and indirectly affected businesses. In the case of food and beverage processing, induced impacts reflect the additional spending by the employees of the processors' suppliers (primary suppliers) and their suppliers' suppliers (secondary suppliers). <i>Example: Using the example from above, the additional wages received by production / farming employees, feed company employees, seed company employees and machinery company employees "induce" spending. For example, these employees make consumer purchases at the grocery store, gas station, etc. The jobs and income that result from these consumer purchases are considered induced impacts.</i> |
| Manufacturing Value-Added | <ul style="list-style-type: none"> Manufacturing value-added is the value of manufacturing revenues plus net change in the inventory of goods in process and finished goods, less the costs of materials and supplies and of the energy, water and vehicle fuel used. |
| Nominal GDP | <ul style="list-style-type: none"> Nominal GDP is the "value added" to the economy (the unduplicated total value of goods and services) that has not been adjusted for inflation. |
| Output | <ul style="list-style-type: none"> Output is the total gross value of all business revenue. This is the broadest measure of economic activity. |

Definitions of the ten food and beverage subsectors are included in Appendix A.



3. INTRODUCTION

STUDY PURPOSE

The Alliance of Ontario Food Processors (AOFP) commissioned MNP LLP (MNP) to carry out an economic impact study of the food and beverage processing sector in Ontario.

The scope of the study included:

- Sector profile – a summary of key statistics relevant to the economic performance of the food and beverage processing sector and its 10 subsectors.
- Economic impacts – analysis of the economic impacts produced by the industry. The analysis quantified output, GDP, tax revenues and employment.
- Other economic, social and community contributions – a description of how the sector segments and their members contribute to development within the Province, through activities such as strategic partnerships and community involvement.

OUR APPROACH

In preparing this report, MNP carried out the following activities:

- Conducted research through publicly available articles and reports.
- Gathered sector data and statistics, including trends and benchmarking data, through agencies and sources such as Statistics Canada and Industry Canada.
- Conducted 15 telephone interviews, including interviews with representatives from Ontario municipalities such as mayors and economic development officials.
- Developed an economic impact model using the data collected through secondary research of published information and statistics.
- Analyzed and summarized economic, social and community contributions based on the telephone interviews and research of available statistics, articles and reports.

ORGANIZATION OF THE REPORT

The remaining sections of the report are organized as follows:

- Chapter 4 provides an introduction to and definition of the Ontario food and beverage processing sector, along with the sector value chain.
- Chapter 5 provides a profile with key statistics of the Ontario food and beverage processing sector and its 10 subsectors.



- Chapter 6 looks at key trends in Ontario's food and beverage processing sector, including recent sector trends, projected food and beverage consumption trends, historical changes in sector statistics and future growth trends.
- Chapter 7 compares key food and beverage processing sector statistics to other major manufacturing sectors and subsectors in Ontario.
- Chapter 8 provides aggregate results for the economic impacts of members of the sector.
- Chapter 9 describes other economic, social and community contributions of the sector value chain.
- Chapter 10 contains a list of the data collection challenges.
- The appendices include profiles of the 10 food and beverage processing subsectors in Ontario; a list of the data sources that informed the study; a summary of the methodology used to estimate the economic impacts along with relevant assumptions; and some background information about MNP.

LEGAL MATTERS

The report is provided for information purposes and is intended for general guidance only. It should not be regarded as comprehensive or a substitute for personalized, professional advice. MNP has relied upon the completeness, accuracy and fair presentation of all information and data obtained from industry associations, telephone interviews and public sources. The accuracy and reliability of the findings and opinions expressed in the presentation are conditional upon the completeness, accuracy and fair presentation of the information underlying them.



4. DEFINITION OF THE FOOD AND BEVERAGE PROCESSING SECTOR

Food and beverage processors provide a critical link in the food supply chain, which begins at the farm gate and ends at your plate. There are many different steps and people involved at each stage starting with farmers; followed by employees in processing plants and those working in the transportation, distribution and warehousing sectors; and finally restaurants and grocery stores.

Current key priorities for the sector include new relationships with farmers, government and customers; a supportive regulatory environment; innovation; and human resource capacity.

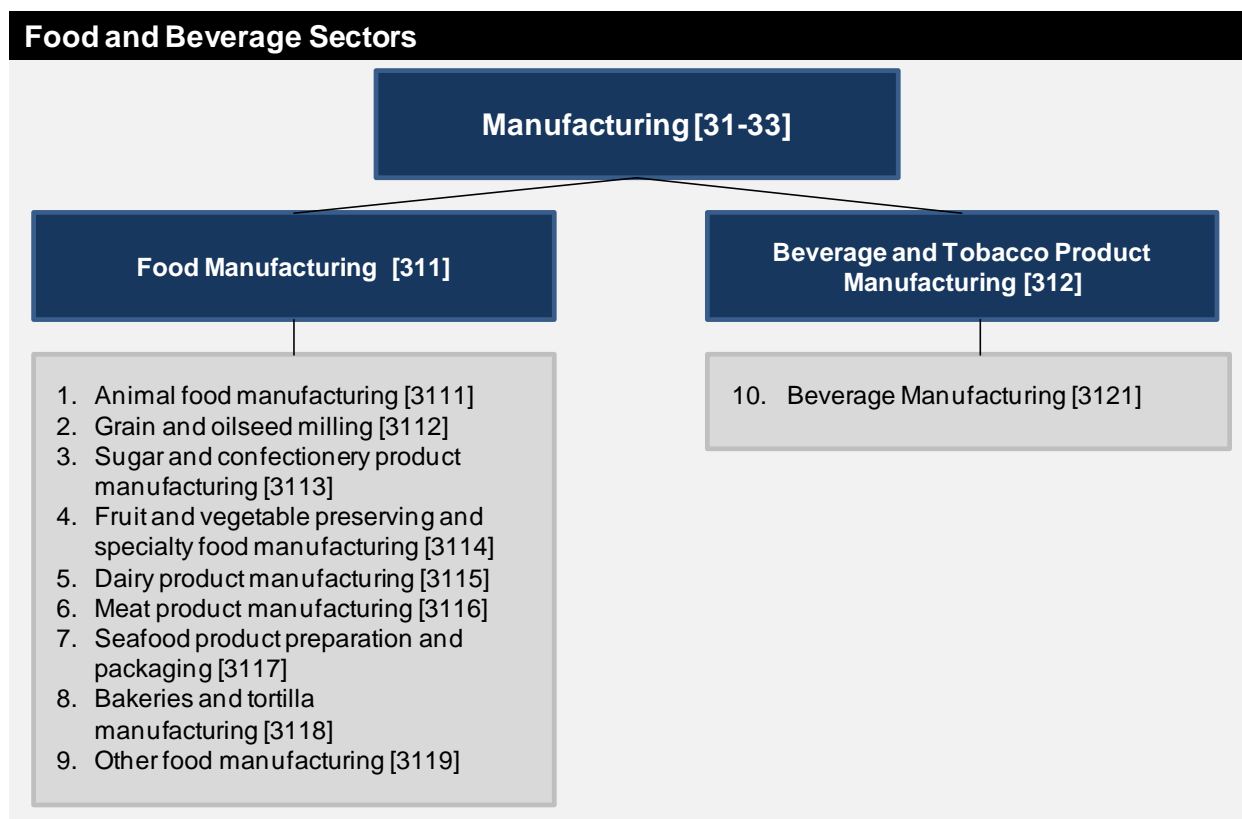
Based on these key priorities, the goals of the sector are by 2013 to be:²³

- A \$40 billion sector by 2013.
- Recognized as a vital component of Ontario's economy by government, industry and the public.
- A competitive sector based on innovation and productivity that supports Ontario's farmers and the provincial economy.
- A major player in Ontario's health agenda.
- A leading provider of long term, skilled and sustainable jobs.
- Positioned to develop new export and domestic markets.
- Focused on working with the supply chain to take advantage of opportunities that benefit all.
- Able to double the current investment in Research and Development and new technology.
- Recognized internationally as a supplier of quality.

²³ Strategy for Ontario's Food and Beverage Processing Industry and About Ontario. Association of Ontario Food Processors. <http://www.aofp.ca/About/>.



The sector is made up of the following 10 subsectors. Subsector definitions as per Industry Canada are included in Appendix A.



Source: Industry Canada

VALUE CHAIN

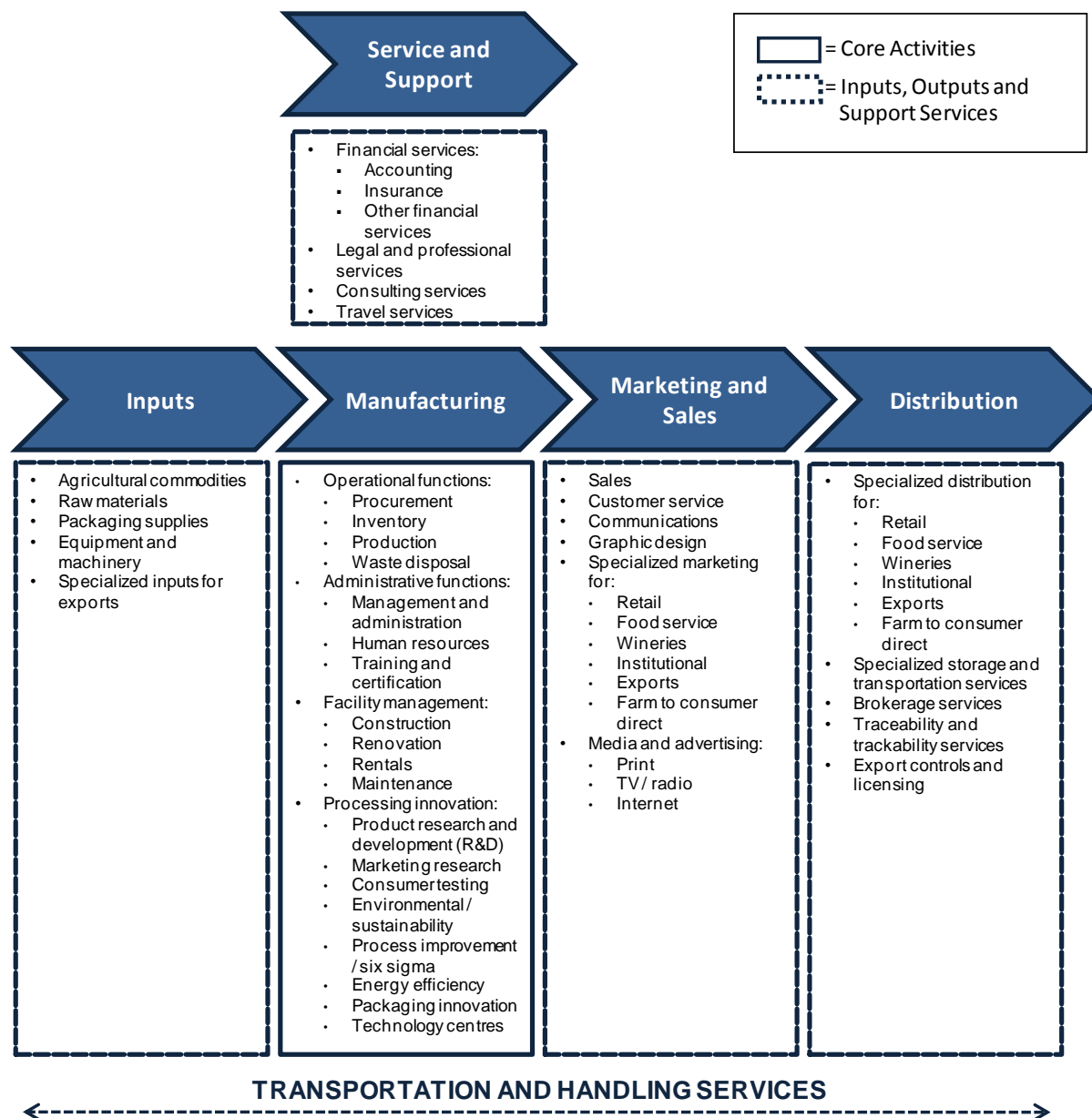
A value chain is a high-level model of how businesses receive raw materials as input, add value to the raw materials through various processes and distribute finished products to customers.

For food and beverage processing, direct impacts arise from the sector's core activities while the indirect and induced impacts arise from the linkages that exist with suppliers and other sectors. These related and ancillary sectors include packaging, production of food industry equipment, biotechnology, agriculture, specialized storage and transportation (i.e. refrigerated), architecture, industrial and graphic design, civil, industrial and environmental engineering, food science and others.

The value chain graphic in Figure 1 displays these linkages by illustrating the components of the sector and the individuals and organizations with which it interacts.



Figure 1. Sector Value Chain Graphic



5. PROFILE OF THE FOOD AND BEVERAGE PROCESSING SECTOR

This section contains a statistical profile of the Ontario food and beverage processing sector. MNP drafted the profile based on available sector statistics from organizations such as Industry Canada, Statistics Canada and Agriculture and Agri-Food Canada. For a full list of our data sources, please see Appendix C.

In this section, MNP first presents the profile of the Ontario food and beverage manufacturing sector as a whole and then by subsector.



SECTOR AS A WHOLE

Table 1 below summarizes the profile of the Ontario food and beverage manufacturing sector as a whole. More detailed explanations of each statistic follow. All statistics in this section are based on Statistics Canada, Annual Survey of Manufacturers and Logging, 2010 and Industry Canada, International Trade Data, 2010 unless otherwise noted.

Please note that Statistics Canada does not report beverage statistics on their own. To protect the confidentiality of Ontario tobacco producers, beverage and tobacco statistics are aggregated. MNP's analysis separated beverage statistics using a set of assumptions that were verified with industry experts. For more information on the assumptions made, please see Appendix D.

Table 1. Food and Beverage Manufacturing Sector Profile

| FOOD AND BEVERAGE MANUFACTURING | |
|---|-----------------|
| | (\$'000) |
| Total revenue | \$38,761,270 |
| Value of shipments | \$34,818,734 |
| Manufacturing value-added | \$12,912,900 |
| Total expenses | \$33,965,971 |
| Total number of employees²⁴ | 126,946 |
| Total wages and salaries²⁵ | \$5,385,978 |
| Number of establishments | 2,899 |
| Exports | \$6,809,634 |
| Imports | \$11,730,935 |

Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010.
 Industry Canada, International Trade Data, 2010.
 Statistics Canada, Input-Output Model.

²⁴ For more information on the employment, wages and salaries data and related assumptions please see Appendix D.

²⁵ Ibid



Revenues and Manufacturing Value-Added

With food and beverage manufacturing revenue totalling \$39 billion, Ontario's food and beverage manufacturing sector is one of the largest manufacturing sectors in North America. Sector sales increased about 8% from \$36 billion in 2005 to \$39 billion in 2010. Manufacturing value-added for the food and beverage manufacturing sector decreased 3% from \$13.2 billion in 2005 to \$12.9 billion in 2010. Manufacturing revenues per production worker for the food manufacturing sector (without beverage processing) increased from \$429 thousand in 2005 to \$496 thousand in 2010.²⁶ In 2010, Ontario's food and beverage manufacturing establishments produced \$35 billion in shipments, representing 40% of the total Canadian food and beverage manufacturing value of shipments. The largest food and beverage processing subsector is meat product manufacturing, followed by dairy product manufacturing, bakeries and tortilla manufacturing, and beverage manufacturing. Meat and dairy product manufacturing together accounted for about 36% of the total food and beverage shipments in 2010.

Expenses

In 2010, the total expenses by the food and beverage manufacturing sector amounted to \$34 billion. The total expenses by the food manufacturing sector (without beverage processing) amounted to \$31 billion, of which about 73% were considered manufacturing costs. Generally, the three most important categories of these costs include costs of materials and supplies; production worker wages; and cost of energy, water and vehicle fuel. In 2010, the food

Figure 2. Total Shipments by Subsector

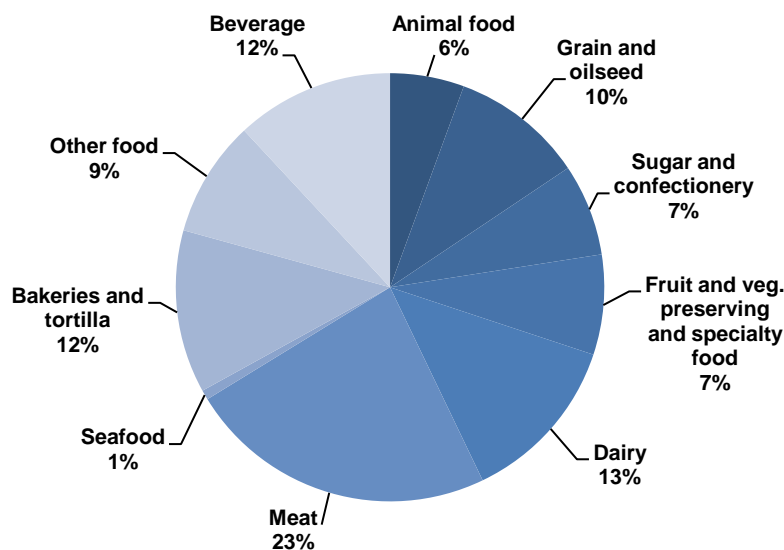
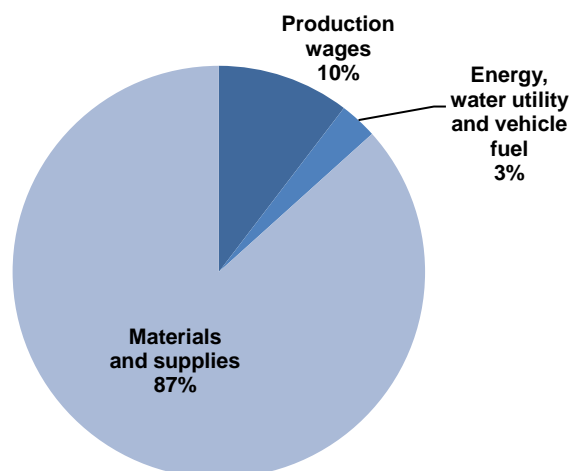


Figure 3. Distribution of Manufacturing Costs



²⁶ This data was only available for the food processing sector and not the food and beverage processing sector as a whole.

manufacturing sector (without beverage processing) spent \$20 billion on materials and supplies for manufacturing activities; \$2 billion on production wages; and \$670 million on energy, water and vehicle fuel.²⁷

Please note that expenses vary greatly within the sector and that inputs can range greatly across subsectors.

Employment and Wages

The economic activity associated with the food and beverage manufacturing sector maintains over 120 thousand jobs across Ontario, with total expenditure on wages and salaries of about \$5 billion.²⁸ The largest food and beverage processing subsector in terms of employment is meat product manufacturing, followed by bakeries and tortilla manufacturing. Together these two subsectors accounted for about half of the total food and beverage employment in 2010.

Number of Establishments

Ontario is home to 2,899 food and beverage manufacturing establishments, including multinationals, home-grown giants and niche-driven businesses. Ontario is also home to many of the world's largest food and beverage manufacturing companies, including Nestle, Maple Leaf Foods, Kellogg's Company, Kraft Foods Inc., H.J Heinz Company, General Foods Corporation, Campbell Company of Canada, PepsiCo, Ferrero and Coca-Cola Bottling Company Ltd. In 2010, the breakdown of sector establishments in Ontario was as follows: 90% of them were micro and small establishments employing from 1 to 99 people, 9% were medium

Figure 4. Employment by Subsector

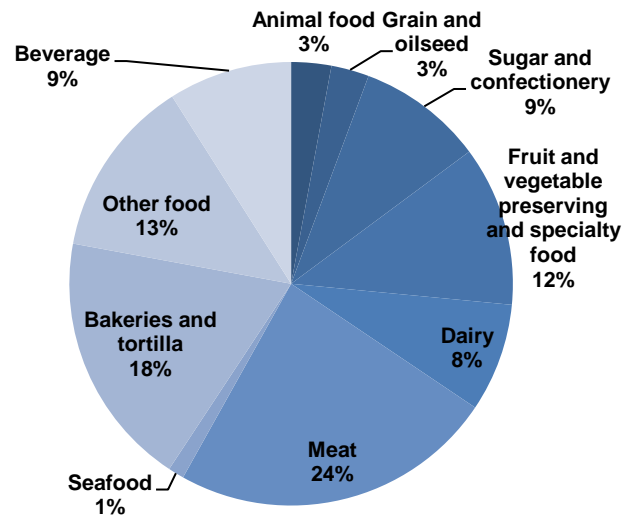
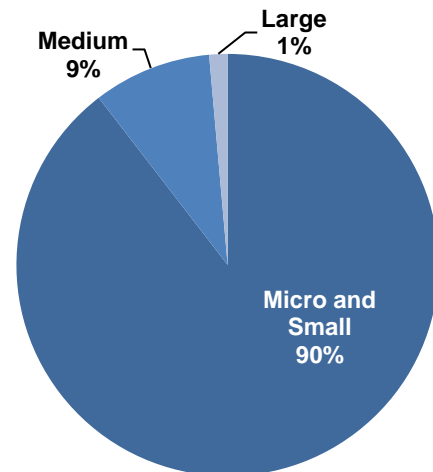


Figure 5. Establishments by Size



²⁷ The remaining \$8 billion in expenses are made up by non-manufacturing employee's salaries and other non operational expenses such as interest expenses.

²⁸ Please note that for employment and wages and salaries data, MNP used Statistics Canada's Input Output Model. For more information on employment, wages and salaries data and related assumptions please refer to Appendix D.

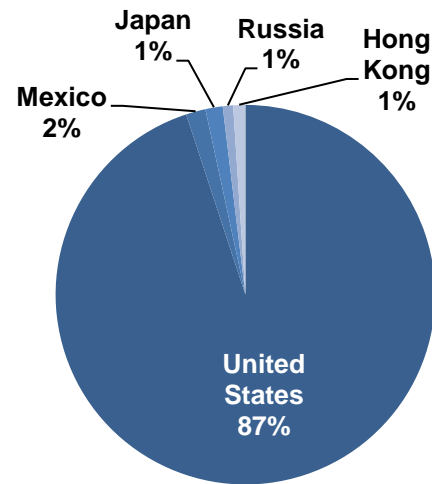
sized employing 100 to 499 people and just over 1% were large sized establishments employing more than 500 people.²⁹ The above size breakdown needs to be interpreted with caution as establishments with significant revenues may only employ a small number of people (e.g. a bunge crushing plant and a retail bakery could employ the same number of people).

International Trade³⁰

In 2010, Ontario's food and beverage manufacturing sector exports were about \$7 billion, accounting for 33% of Canada's total food and beverage manufacturing exports. Ontario's food manufacturing sector has forged strong trade partnerships with the US, Mexico, Asia and Europe. Total food manufacturing exports in 2010 were about \$6 billion (without beverage manufacturing), of which about 92% were destined to the top five export markets: \$5 billion, \$97 million, \$86 million, \$51 million and \$60 million went to the US, Mexico, Japan, Russia and Hong Kong, respectively.

Approximately 20% of the food and beverage manufacturing sector's shipments were exported in 2010. Therefore, about 80% of food and beverage manufacturing shipments in Ontario were destined for the domestic market and the rest were exported. Some subsectors are more export oriented than others. For instance, 47% of seafood product shipments, 36% of sugar and confectionary shipments and 33% of the bakeries and tortilla shipments were exported.

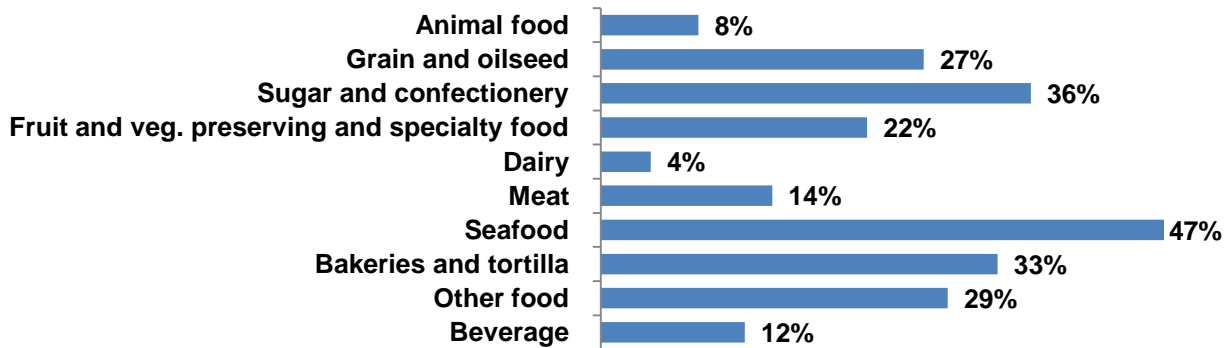
Figure 6. Food Manufacturing Exports



²⁹ Canadian Business Patterns Database. Statistics Canada. December 2010.

³⁰ Please note that 2011 trade statistics are available. We report 2010 trade statistics to be consistent with the remaining sector statistics (revenues, expenses, etc.) for which only 2010 data is published.

Figure 7. Food and Beverage Export Intensities by Subsector

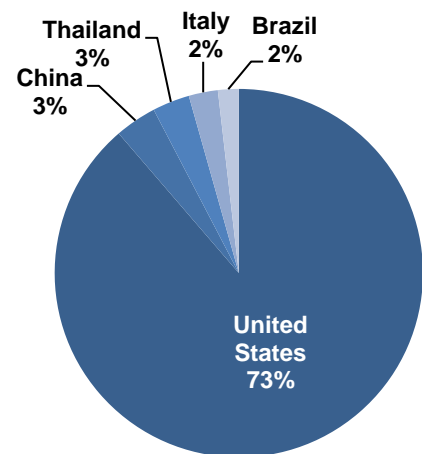


Export intensity is calculated as a share of value of shipments.

In 2010, Ontario's food and beverage manufacturing sector imports were about \$12 billion, accounting for 56% of Canada's total food and beverage manufacturing imports. Total food manufacturing imports in 2010 were about \$10 billion (without beverage processing), of which about 87% came from the top five importing countries; \$7 billion, \$309 million, \$275 million, \$215 million and \$153 million came from the US, China, Thailand, Italy³¹ and Brazil respectively.

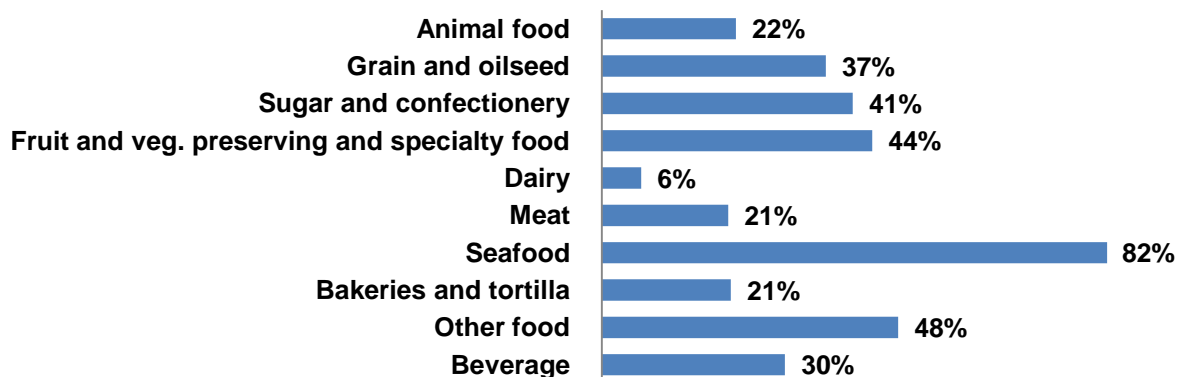
Food and beverage manufacturing imports accounted for approximately 30% of the domestic market in 2010. Some of the subsectors with the highest export intensities also have the highest import intensities, including seafood manufacturing (82%) and other food manufacturing (48%).

Figure 8. Food Manufacturing Imports



³¹ This includes Vatican City State imports.

Figure 9. Import Intensities by Subsector



Import intensity is calculated as imports / (value of shipments – exports + imports).³²

Please note that the above trade statistics should be interpreted with caution, because:

- Statistics Canada and Industry Canada export data is sometimes attributed to the US when they really travel through the US to other destinations.
- Statistics Canada attributes some imports to Ontario when they are really going through Ontario to other provinces.

³² Import intensity is defined as the ratio of imports to manufacturing revenues minus exports plus imports multiplied by 100. The more an industry is import oriented, the higher this ratio.



SUBSECTORS

The table below summarizes the 10 Ontario food and beverage manufacturing subsector profiles. More detailed descriptions are included in Appendix A.

The largest subsectors in terms of revenue generation are meat manufacturing; dairy manufacturing; bakeries and tortilla; and beverage processing. Meat manufacturing and bakeries and tortilla employed the most workers and staff.

Table 2. Food and Beverage Manufacturing Subsector Profile³³

| | Value \$('000) | Percentage of Food and Beverage Manufacturing ³⁴ |
|----------------------------------|----------------|---|
| ANIMAL FOOD | | |
| Total revenue | \$2,448,256 | 6% |
| Value of shipments | \$1,949,379 | 6% |
| Manufacturing value-added | \$468,576 | 4% |
| Total expenses | \$2,195,733 | 6% |
| Total number of employees | 3,704 | 3% |
| Total wages and salaries | \$147,772 | 3% |
| Number of establishments | 179 | 6% |
| Exports | \$158,609 | 2% |
| Imports | \$500,223 | 4% |
| GRAIN AND OILSEED MILLING | | |
| Total revenue | \$4,014,107 | 10% |
| Value of shipments | \$3,483,566 | 10% |
| Manufacturing value-added | \$1,012,451 | 8% |
| Total expenses | \$3,532,263 | 10% |
| Total number of employees | 3,504 | 3% |
| Total wages and salaries | \$172,911 | 3% |
| Number of establishments | 63 | 2% |
| Exports | \$936,854 | 14% |
| Imports | \$1,464,825 | 12% |

³³ For more information on the employment data, wages and salaries data and related assumptions please see Appendix D.

³⁴ Beverage manufacturing data was estimated using the assumptions specified in Appendix C.



| | Value \$('000) | Percentage of Food and Beverage Manufacturing ³⁴ |
|--------------------------------|----------------|---|
| SUGAR AND CONFECTIONERY | | |
| Total revenue | \$2,620,133 | 7% |
| Value of shipments | \$2,416,756 | 7% |
| Manufacturing value-added | \$923,509 | 7% |
| Total expenses | \$2,303,589 | 7% |
| Total number of employees | 11,635 | 9% |
| Total wages and salaries | \$463,448 | 9% |
| Number of establishments | 136 | 5% |
| Exports | \$866,007 | 13% |
| Imports | \$1,072,744 | 9% |
| FRUIT AND VEGETABLE | | |
| Total revenue | \$3,434,659 | 9% |
| Value of shipments | \$2,627,466 | 8% |
| Manufacturing value-added | \$1,099,304 | 9% |
| Total expenses | \$2,971,256 | 9% |
| Total number of employees | 14,816 | 12% |
| Total wages and salaries | \$627,840 | 12% |
| Number of establishments | 194 | 7% |
| Exports | \$582,824 | 9% |
| Imports | \$1,610,926 | 14% |
| DAIRY PRODUCTS | | |
| Total revenue | \$5,109,119 | 13% |
| Value of shipments | \$4,452,705 | 13% |
| Manufacturing value-added | \$966,278 | 7% |
| Total expenses | \$4,854,698 | 14% |
| Total number of employees | 10,043 | 8% |
| Total wages and salaries | \$436,888 | 8% |
| Number of establishments | 329 | 11% |
| Exports | \$185,200 | 3% |
| Imports | \$292,775 | 2% |



| | Value \$('000) | Percentage of Food and Beverage Manufacturing ³⁴ |
|--|----------------|---|
| MEAT PRODUCTS (INCLUDING POULTRY) | | |
| Total revenue | \$8,399,192 | 22% |
| Value of shipments | \$8,137,663 | 23% |
| Manufacturing value-added | \$2,414,751 | 19% |
| Total expenses | \$7,722,982 | 23% |
| Total number of employees | 30,058 | 24% |
| Total wages and salaries | \$1,275,205 | 24% |
| Number of establishments | 349 | 12% |
| Exports | \$1,161,708 | 17% |
| Imports | \$1,806,722 | 15% |
| SEAFOOD | | |
| Total revenue | \$265,653 | 1% |
| Value of shipments | \$255,114 | 1% |
| Manufacturing value-added | \$113,825 | 1% |
| Total expenses | \$239,169 | 1% |
| Total number of employees | 1,474 | 1% |
| Total wages and salaries | \$45,920 | 1% |
| Number of establishments | 43 | 1% |
| Exports | \$119,770 | 2% |
| Imports | \$634,029 | 5% |
| BAKERIES AND TORTILLA | | |
| Total revenue | \$4,719,412 | 12% |
| Value of shipments | \$4,284,172 | 12% |
| Manufacturing value-added | \$2,148,275 | 17% |
| Total expenses | \$4,198,846 | 12% |
| Total number of employees | 23,658 | 19% |
| Total wages and salaries | \$961,033 | 18% |
| Number of establishments | 844 | 29% |
| Exports | \$1,416,458 | 21% |
| Imports | \$763,774 | 7% |



| | Value \$('000) | Percentage of Food and Beverage Manufacturing ³⁴ |
|---------------------------------|----------------|---|
| OTHER FOOD MANUFACTURING | | |
| Total revenue | \$3,314,654 | 9% |
| Value of shipments | \$3,058,231 | 9% |
| Manufacturing value-added | \$1,193,578 | 9% |
| Total expenses | \$2,910,319 | 9% |
| Total number of employees | 16,616 | 13% |
| Total wages and salaries | \$674,977 | 13% |
| Number of establishments | 343 | 12% |
| Exports | \$884,391 | 13% |
| Imports | \$2,029,920 | 17% |
| BEVERAGE MANUFACTURING | | |
| Total revenue | \$4,436,085 | 11% |
| Value of shipments | \$4,153,682 | 12% |
| Manufacturing value-added | \$2,572,353 | 20% |
| Total expenses | \$3,037,116 | 9% |
| Total number of employees | 11,438 | 9% |
| Total wages and salaries | \$579,982 | 11% |
| Number of establishments | 419 | 14% |
| Exports | \$497,813 | 7% |
| Imports | \$1,554,997 | 13% |

Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010.
 Industry Canada, International Trade Data, 2010.
 Statistics Canada, Input-Output Model.



6. TREND ANALYSIS

This section of the report looks at key trends in Ontario's food and beverage processing sector. The section contains an analysis of recent sector trends, an analysis of projected food and beverage consumption, an analysis of how the sector profile changed over the past five years and a snapshot of future growth trends.

RECENT TRENDS

There are a number of internal and external factors or trends that have impacted the Ontario food and beverage processing sector over the last several years. The main trends are presented below in the form of a SWOT analysis. **This is not meant to be an exhaustive analysis but instead a high level discussion of some of the key provincial and national trends impacting the sector.** The SWOT analysis includes:

- **Strengths.** Internal attributes of the sector or the province of Ontario that could be helpful to achieving success / growth.
- **Weaknesses.** Internal attributes of the sector or the province of Ontario that could be harmful to achieving success / growth.
- **Opportunities.** External conditions that could be helpful to the sector's success / growth.
- **Threats.** External conditions that could be harmful to the sector's success / growth.

Figure 10. SWOT Analysis Overview

| | Helpful to achieving success | Harmful to achieving success |
|---|------------------------------|------------------------------|
| Internal - attributes of the sector or province | Strengths | Weaknesses |
| External - attributes of the environment | Opportunities | Threats |



Strengths

As outlined in the 2011 report entitled A Global Hub for Food Processing: Agri-Food Asset Map (Agri-Food Asset Map),³⁵ the sectors' assets include:

1. **North American Supply Chain and Market.** Location and logistics are a major strength in the province. The Ontario market has more than 13 million people and the largest concentration of Canada's highest income earners. Ontario companies have access to a \$17 trillion marketplace under the North American Free Trade Agreement and 139 million consumers are within a day's drive of Southern Ontario.³⁶ From a supply chain perspective, Ontario's proximity to the United States (US) is a major advantage. Ontario is close to several major US markets and has a highly efficient transportation infrastructure, including road, rail, marine and Toronto's international airport which provides direct routes to about 50 cities in the US and over 100 cities abroad.³⁷ In 2010, Ontario companies exported more than \$304 billion worth of products and services, with about 80% of that total destined for the United States.
2. **Agriculture and Resources in Ontario.** The Ontario agri-food sector purchases 65% of Ontario's farm food products. The rich agricultural lands and mild climate of southern Ontario allow for the production of more than 200 agricultural commodities, which is another important strength for the sector in Ontario.³⁸ In addition, there is an abundant water supply and low cost of energy in Ontario.
3. **Quality Research.** Ontario is known for quality research and educational institutions. Examples include the universities of Guelph, Toronto, Queens and Western Ontario. In Ontario, top-notch researchers are exploring many areas of advanced manufacturing, information technology, agriculture and life science. More than \$13.9 billion in R&D takes place every year in Ontario.³⁹
4. **Commercialization Opportunities.** The Ontario economic environment is very welcoming towards commercialization opportunities. Centres such as the Agri-Tech Commercialization Centre, Guelph Food Technology Centre, Toronto Food Business Incubator and the Vineland Research and Innovation Centre help Ontario processors bring innovative agri-food products to market.

³⁵ A Global Hub for Food Processing: Agri-Food Asset Map. Synthesis Agri-Food Network and Government of Ontario. 2011.

http://www.mri.gov.on.ca/english/publications/documents/Agrifood_Summary_Nov2010_ENG_AODA.pdf.

³⁶ Why Ontario: Proximity to Market. Government of Ontario. February 2012.

<http://www.sse.gov.on.ca/medt/investinontario/en>.

³⁷ A Global Hub for Food Processing: Agri-Food Asset Map. Synthesis Agri-Food Network and Government of Ontario. January 2011.

http://www.mri.gov.on.ca/english/publications/documents/Agrifood_Summary_Nov2010_ENG_AODA.pdf.

³⁸ Ontario Where Good Ideas Grow. Ontario Ministry of Economic Development and Trade. March 2009.

<http://www.investinontario.com>.

³⁸ Why Ontario: Proximity to Market. Government of Ontario. February 2012.

<http://www.sse.gov.on.ca/medt/investinontario/en>.

³⁹ Research & Development in Ontario. Ontario Ministry of Economic Trade and Development. March 2011.

<http://www.investinontario.com>.



5. **Highly Adaptable Workforce.** In Ontario, there are over 50 post secondary courses and programs in the areas of agriculture, food science, nutritional science and culinary arts. According to the Agri-Food Asset Map report, there are plans to increase skilled labour in the food processing sector, with one-year to three-year college courses in food processing technology and a process operator apprenticeship.
6. **Ontario Food Clusters.** Ontario, particularly in areas such as Toronto and Guelph, is one of the largest and most competitive food clusters in North America, ranking as the third largest food processing jurisdiction. Many international food processing companies are locating to Ontario. In addition, the province has a well established network of primary processors, ingredients manufacturers, speciality importers and further value-added processors.⁴⁰ As mentioned above, food clusters are supported by several important assets including industry programs, leading research, comprehensive infrastructure, a skilled workforce, post-secondary education and a number of supplementary industries.

Weaknesses

There are several internal attributes that could potentially pose barriers to the sector's success. They include:

1. **Productivity.** The machinery in the agri-food sector is older than in other sectors, which reduces productivity and will require significant levels of investment to upgrade equipment and train new employees. In some cases, Ontario's food processing plants lack scale when compared to US competitors. This issue has been documented in the meat processing subsector but applies to other sectors of food and beverage processing as well.
2. **Attracting and Retaining Workforce.** A 2004/2005 study on the agri-food workforce in Ontario provided labour supply projections out to 2026.⁴¹ The study predicted that imbalances will soon develop between projected labour demand and expected labour supply. With the exception of Toronto and surrounding areas, food processing firms face serious, long-term worker shortages. The grain and oilseed milling subsector and the sugar and confectionery subsector have older labour forces on average and are expected to experience the impact of labour shortages sooner than other subsectors. The labour supply in the meat and baking subsectors, two of the most labour intensive subsectors, may worsen and spread the shortage to other subsectors.
3. **Response to Retail and Distribution Consolidation.** There has been a trend towards retail and distribution consolidation in Ontario. Several major food retailers and distributors dominate the provincial marketplace. This can be a risk especially for small and medium sized food and beverage processors, who may not have the capacity to supply at this scale. There can also be

⁴⁰ Ontario Sectors: Food Processing. Government of Ontario. December 2010.
http://www.sse.gov.on.ca/medt/investinontario/en/Pages/OS_food.aspx.

⁴¹ Workforce Ahead: A Labour Study Of Ontario's Food Processing Industry. For the Alliance of Ontario Food Processors by e-Economics Consulting and Jayeff Partners. 2004-2005.
<http://www.aofp.ca/Publications/Reports.aspx>.



pressures to lower costs, and bargaining power for small and medium sized retailers is often limited.

4. **Seasonality.** Seasonality related to the production of horticulture and other commodities in Ontario provides a unique challenge to the agriculture and agri-food sectors. The sectors have to competently manage seasonality to be successful.

Opportunities

There are several important external factors and conditions that the sector can leverage to its advantage. Key opportunities include:

1. **Niche and Specialty Food Trends.** Due to ethnically diverse populations in Ontario and other markets there has been a growing interest in creative new food products.⁴² Ontario is leading the way in some product areas. In the area of creative food there has been a trend towards high quality, ethnic, fusion, healthy and organic food products. This opportunity goes beyond ethnic foods for such as Halal and Kosher and food for markets such as Asian and Indian but includes niche markets and health/wellness trends such as better for you foods, naturally healthy foods, value added and convenient foods that you can eat on the go and intolerance foods (e.g. gluten and lactose free foods). Even though the aging population is a weakness for future labour supply, there are also opportunities for the food and beverage processing sector related to the aging baby-boomer population. This generation is believed to have an unparalleled level of disposable income and is expected to change some of the consumer demand patterns. The aging population most likely will drive demand for higher-end food products, smaller portions and healthy foods including functional foods and nutraceuticals.
2. **Buy Local.** Canadians are increasingly subscribing to the "buy local" and "100 mile diet" philosophies due to concerns over imported food. An Ipsos Reid study showed that consumers are eager to support Ontario farmers and the local economy by choosing food produced in Ontario.⁴³ Industry initiatives are in place to support the buy local movement such as "Homegrown Ontario" which was created to brand and promote Ontario meat and poultry. By buying local, the economic impacts of growing, processing and retailing food all remain within the Province.
3. **Investing in Technology.** Social technology will continue to impact engagement and communication with customers. The buy local food movement, mistrust of advertising and a growing consumer interest in food origin will continue to stimulate this trend. Technology is advancing at an unprecedented rate. Technology related opportunities exist to improve innovation and efficiencies, robotics, traceability and trackability technologies for instance. Technology can also become a challenge if the necessary investments are not made.

⁴² A New Menu for Ontario's Food Economy. Martin Prosperity Institute. February 2009.

<http://martinprosperity.org/insights/insight/a-new-menu-for-ontarios-food-economy>.

⁴³ Support Ontario, Buy Local. Ontario Meat and Poultry. <http://ontariomeatproducts.ca/homegrown-ontario/about/>.



4. **Investing in Sustainability.** Sustainability has been a major trend in the sector and will continue to be an important consideration. Consumers are looking for evidence of social, economic and environmental sustainability including lower greenhouse gas emissions, smaller carbon footprints, fair trade programs and responsible production practices. Investing in the area of sustainability is related to marketing and revenue increasing opportunities.

Additional trends and opportunities related to shifting consumption patterns are outlined in the “Consumptions Trends to 2020 Section” below.

Threats

There are several external conditions that could threaten the sector’s success. Potential threats include:

1. **Adaptation to the Appreciating Canadian Dollar.** A threat for Ontario’s food and beverage processors is the appreciation of the Canadian dollar, and the sector’s ability to adapt to the situation is a challenge. During and before the early 2000s, a low Canadian dollar provided Ontario’s food and beverage processing sector with a cost advantage over its US counterparts and exports grew consistently. Exports, which represent a significant portion of the sector’s production, are often priced in US dollars. With the recent appreciation of the Canadian dollar, profit margins for manufactures have been sinking. The appreciation of the Canadian dollar further increases the attractiveness of importing from the US and other countries for Canadian consumers. Some food and beverage manufacturers in Ontario are having difficulty responding to the appreciation of the Canadian dollar by focusing on innovation and efficiency improvements.
2. **Competition from Emerging Countries.** Ontario food and beverage processors face increased competition from imports from emerging nations such as China. With lower labour costs, Canada and hence Ontario has a cost disadvantage.
3. **Regulation.** Foreign protectionism and subsidies on agricultural commodities and products restrict market access and can make entry to global markets difficult. Food and beverage production including raw materials, packaging, logistics and storage is strictly regulated by multiple levels of government. With increasingly strict food safety regulations, food and beverage processing companies have to make significant capital investments to comply. Regulatory barriers for importing into the US include country of origin labelling and the Food Modernization Safety Act. The act holds US distributors responsible for food safety problems and importing Canadian products holds additional risks. Threats related to free trade agreements include international products from Europe and the US flooding The Ontario marketplace. There are also interprovincial barriers due to regulations between provinces, in the case of wine for instance.
4. **Underinvestment in Food Safety.** Food and beverage products in Canada are generally safe and there is a rich and diverse supply of product. Over the last years, however, there has been an increasingly large number of food recalls. This trend is expected to continue in the future, due to improvements in testing technology which allow minute traces of bacteria and residues to be identified. Food and beverage processors have to make prevention and preparation processes a priority to avoid the potentially negative health, financial and public relations implications of these situations.



5. **Biosecurity and Terrorism.** Another potential threat to the sector's success is related to biosecurity and terrorism. The US borders may temporarily be closed for trade if such threats should materialize. In 2010, Ontario companies exported more than \$304 billion worth of products and services, with about 80% of that total destined for the US.⁴⁴ Temporarily stalled or blocked exports to the US would negatively impact the Ontario food and beverage processing sector's exports and hence profitability.

CONSUMPTION TRENDS TO 2020

Many of the current key trends outlined above are shaping food and beverage consumption trends over the next 10 years. A recent study by Agriculture and Agri Food Canada investigated Canadian beverage consumption to the year 2020.⁴⁵ The study analyzed data from Statistics Canada, Agriculture and Agri Food Canada, Health Canada, the Canadian Food Inspection Agency and other relevant sources, and combined factors and issues that are expected to drive consumer attitudes and perceptions using consumption forecasts based on Canadian statistical history.

The top food and beverage consumption trends to 2020 are summarized in the table below.

Table 3. Summary of Food Trends to 2020

| Trend | Impact |
|-------------------------------|---|
| Aging population | The aging population will impact the type and quantity of food demanded as well as where it will be consumed. |
| Evolving society | Brands will become less of a status symbol and more an expression of individualization. |
| Changing meal patterns | Consumers will become even more disconnected from food preparation. Shopping and eating habits will be sporadic. Meal planning cycles will be shorter, snacking will replace courses as well as whole meals, and food will become even more portable. |
| Shifting expenditures | The move to spending less of our disposable income on food will continue and retail food purchases will still dominate, while food service will see only modest growth in expenditures. The real shift will be in prepared meals and take-outs. |
| Food for health | There will be a move to adopt healthier lifestyles but it will be slow. |
| The educated consumer | Consumers will become more conscious of nutrition and food ingredients than ever before and foods with a function beyond just energy will be in demand, as consumers seek to manage their health and prevent disease. |

⁴⁴ Why Ontario: Proximity to Market. Government of Ontario. February 2012.

<http://www.sse.gov.on.ca/medt/investinontario/en>.

⁴⁵ Canadian Food Trends to 2020 - A Long Range Consumer Outlook. Agriculture and Agri Food Canada. June 2011.



| Trend | Impact |
|--|--|
| Ethnic food | Immigration from regions off the Pacific Ocean and Hispanic influences will lead to diversification, fusion and blended cuisines. |
| No trade-off for convenience | The next wave of product differentiation will be to provide fresher, more nutritious, great tasting and/or ethnic foods in the most convenient forms possible. |
| Vegetables | True vegetarianism may not grow dramatically, but consumption of meatless meals will continue to increase. |
| Organic foods | Organics, at a modest price premium, will continue to rise, especially as quality and availability matches that of conventionally produced foods. |
| Small indulgences | Adult Canadians will embrace gourmet foods and boutique brands. Slow foods, high quality, smaller portions and nutritious foods will gradually replace demand for fast, big and cheap foods. |
| Food safety and production issues | Consumer confidence in foods tends to shift with the news story of the day. Lack of consumer confidence, for which ever reason, will lead to avoidance of the offending food. |

As shown in Figure 11, in the early to mid 2000s per capita consumption was projected to increase from 400 kilograms per person, to about 424 kilograms (excluding eggs and juices) for a 6% increase by 2020.⁴⁶ Increases were predicted for foods such as the poultry and fish; sugars and syrups; and fats and oils. Decreases were predicted in the red meat; dairy, pulses and nuts; and vegetable fruit juices category.

Since the per capita predictions were made, consumer buying behaviour has changed significantly with the recession of 2008 and 2009. Consumer frugality seems to be growing according to grocery retailers and the fact that real income growth for consumers has been flat for some time. The growth rate in nominal consumer expenditures on food in Canada from 2005 to 2009 has not come close to increases of 6% annually.⁴⁷ More modest growth than 6% is therefore predicted to 2020.⁴⁸

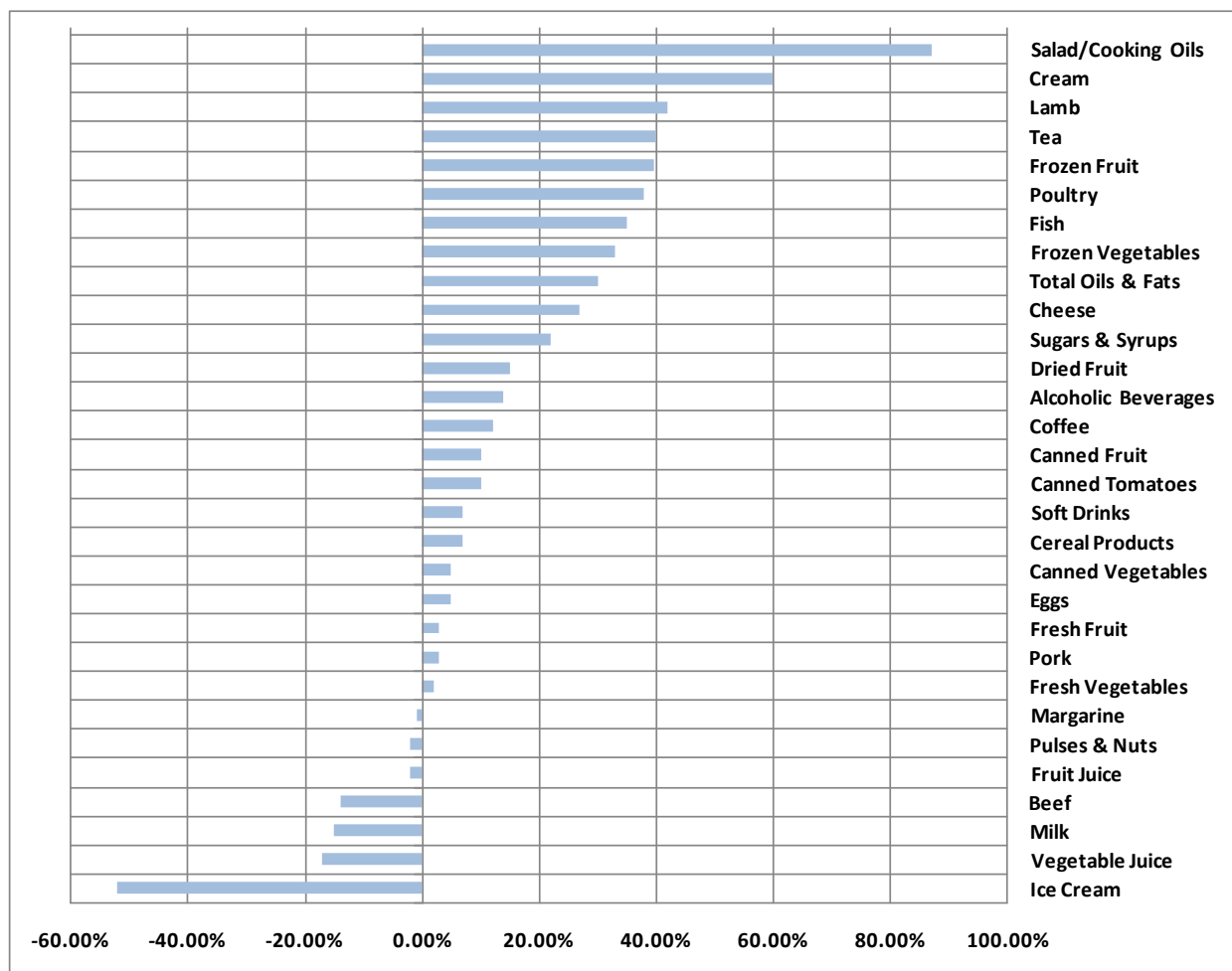
⁴⁶ Canadian Food Trends to 2020 - A Long Range Consumer Outlook. Agriculture and Agri Food Canada. June 2011.

⁴⁷ Survey of Household Spending (SHS), Household Spending on Food, by Province Statistics Canada. December 2010.

⁴⁸ Survey of Household Spending (SHS), Household Spending on Food, by Province Statistics Canada. December 2010.



Figure 11. Per Capita Consumption to 2020



The base of the percentage change is the average actual consumption of three years (2001, 2002 and 2003).

Source: Agriculture and Agri Food Canada. June 2011.



HISTORICAL TRENDS

On the next pages, MNP presents historical trends for each of the following key sector statistics (based on Statistics Canada and Industry Canada data):

1. Revenue
2. Value of Shipments
3. Expenses
4. Number of Establishments
5. Exports
6. Imports

Highlights are summarized in the box below.

The **key historical trends** in the food and beverage processing sectors are as follows:

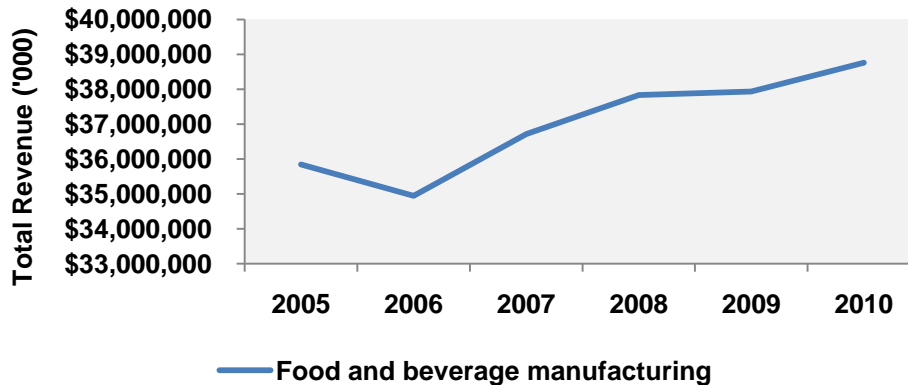
- Food and beverage manufacturing generally experienced increases over the last five years in terms of value of shipments, revenues, expenses and exports with some slow downs around 2006 and 2007.
- Food and beverage manufacturing imports have also grown over the last five years and at a faster pace than exports.
- With sector consolidation, the number of food and beverage manufacturing establishments decreased over the last five years (a 2% decrease from 2005 to 2010).



Revenues

Total **food and beverage manufacturing revenues** have increased over the last 5 years. Revenue increased from \$35.8 billion in 2005 to \$38.8 billion in 2010. This was a total increase of 8% or an average increase of 2% per year. There was increase in revenues each year except from 2005 to 2006 (2% decrease).

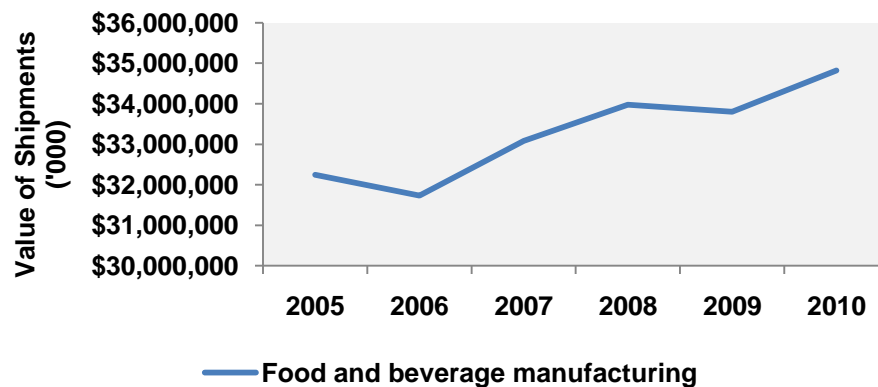
Figure 12. Ontario Food and Beverage Revenues, 2005 to 2010



Value of Shipments

Total **food and beverage manufacturing value of shipments** have increased over the last 5 years. Value of shipments increased from \$32.2 billion in 2005 to \$34.8 billion in 2010. This was a total increase of 8% or an average increase of 2% per year. There was increase in value of shipments each year except from 2005 to 2006 (2% decrease) and from 2008 to 2009 (1% decrease).

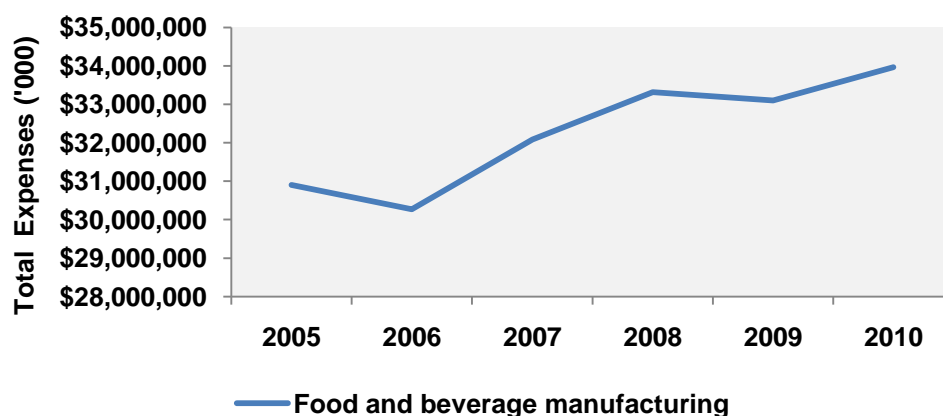
Figure 13. Ontario Food and Beverage Value of Shipments, 2005 to 2010



Expenses

Total **food and beverage manufacturing expenses** increased over the last 5 years. Expenses increased from \$30.9 billion in 2005 to \$34.0 billion in 2010. This was a total increase of 10% or an average increase of 2% per year. Expenses increased each year except between 2005 and 2006 (2% decrease) and between 2008 and 2009 (1% decrease).

Figure 14. Ontario Food and Beverage Expenses, 2005 to 2010



Number of Establishments

The total **number of food and beverage manufacturing establishments** decreased from 2,953 in 2005 to 2,899 in 2010 (2% decrease). The number of establishments continuously decreased except from 2006 to 2007 where there was an increase (i.e. from 2,866 to 2,978 establishments) and from 2009 to 2010 when there was very little change (from 2,898 to 2,899).

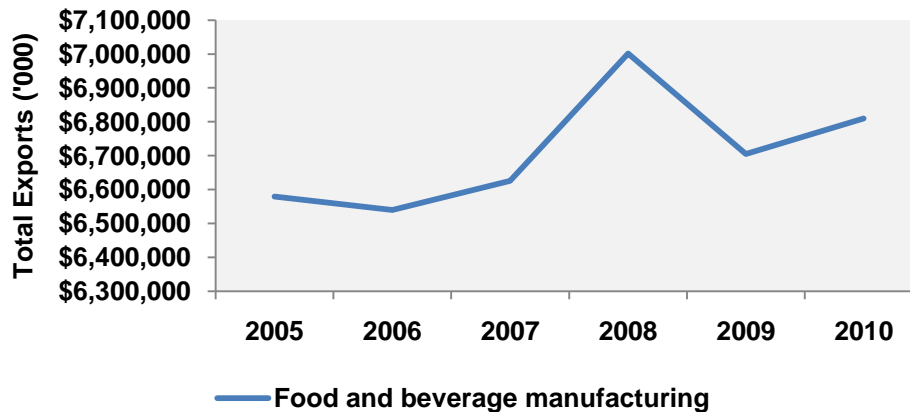
Figure 15. Ontario Food and Beverage Establishments, 2005 to 2010



Exports

As shown in the graph below, **food and beverage exports** have increased over the last five years. Exports increased from \$6.6 billion in 2005 to \$6.8 billion in 2010. This was a total increase of 4% or an average increase of 1% per year. There was an increase in exports every year except from 2005 to 2006 (1% decrease) and from 2008 to 2009 (4% decrease).

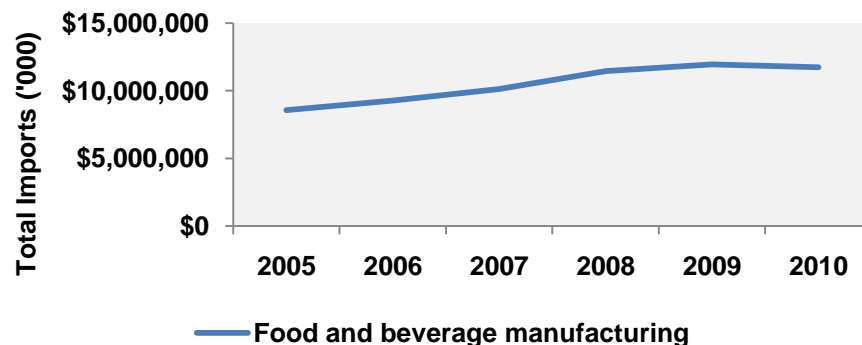
Figure 16. Ontario Food and Beverage Exports, 2005 to 2010



Imports

As shown in the graph below, **food and beverage manufacturing imports** have increased over the last five years. Imports increased from \$8.6 billion in 2005 to \$11.7 billion in 2010. This was a total increase of 37% or an average increase of 7% per year. There was growth in imports each year from 2005 to 2009, and a decrease from 2009 to 2010 (2% decrease).

Figure 17. Ontario Food and Beverage Imports, 2005 to 2010



FUTURE GROWTH SNAPSHOT

The trend research outlined so far showed that:

- Ontario's food and beverage sector has significant strengths which support sector success today and will continue to so in the future. Examples of factors contributing to success include Ontario's proximity to national and international markets, significant trade infrastructures and diverse production of agricultural commodities in the province.
- Even with the economic downturn, the Ontario agri-food processing sector has experienced growth over the last five years. For example, both revenues and expenses grew by about 2% a year from 2005 to 2010.

In addition, Ontario's population is projected to experience healthy growth over the next 26 years, rising over 34%, or close to 5 million, from an estimated 13 million on July 1, 2010 to close to 18 million by July 1, 2036. The annual rate of growth of Ontario's population is projected to slow gradually over the projection period, starting at 1.2% in 2010 to 2011 and moderating to 1.0% by 2035 to 2036.⁴⁹

Based on these findings, it is likely that the Ontario food and beverage processing sector will continue growing its exports, revenues and expenses at an average of about 1% to 3% annually over the next five years. Due to industry consolidation, the number of establishments may continue to decrease slightly and the number of employees may remain fairly stable.

⁴⁹ Ontario Population Projections Update. Ontario Ministry of Finance. Spring 2011.



7. BENCHMARKING ANALYSIS

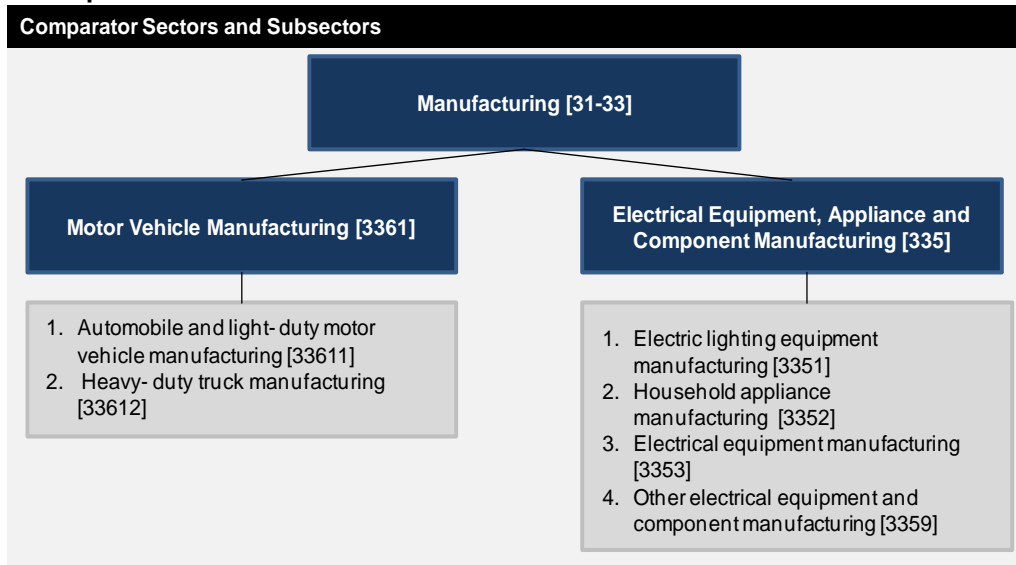
This section includes key benchmarking statistics comparing the food and beverage processing sector to the following major manufacturing sectors and subsectors in Ontario:

1. **Electrical equipment, appliance and component manufacturing.** According to Industry Canada, this sector comprises establishments primarily engaged in manufacturing products that generate, distribute and use electrical power. Sample activities include:
 - Manufacturing electric lamp bulbs and tubes and lighting fixtures.
 - Manufacturing kitchen, bathroom and other household appliances.
 - Manufacturing equipment that generates and distributes electrical power.
2. **Motor vehicle manufacturing (subsector of transportation equipment manufacturing).** According to Industry Canada, this subsector comprises establishments primarily engaged in manufacturing motor vehicles. Sample activities include manufacturing and assembly of complete motor vehicles, as well as manufacturing motor vehicle chasses.

For total revenues and employment, MNP also compared the food and beverage processing sector to the Agriculture Sector in Ontario. A diagram of the comparator manufacturing sectors and subsectors is shown below.



Figure 18. Comparator Sector and Subsector NAICS Codes



Source: Industry Canada

BENCHMARKING STATISTICS

Our **benchmarking analysis** showed that in 2010:

- The food and beverage processing sector was the second largest of all manufacturing sectors in terms of value of shipments and revenues in Ontario.
- The food and beverage processing sector was the largest of the comparator sectors in terms of employment.
- The food and beverage manufacturing sector's expenses, imports and exports surpassed the electrical equipment, appliance and component manufacturing sector. The motor vehicle manufacturing subsector, on the other hand, was larger than food and beverage processing in terms expenses, imports and exports.
- While comparator sectors' revenue decreased over the last five years (2005 to 2010), the Ontario food and beverage sector and the agriculture sector experienced growth. Food and beverage processing was therefore more recession resistant than the comparator manufacturing sectors and subsectors.
- The food and beverage processing sector had more establishments than the comparator manufacturing sectors and subsectors.

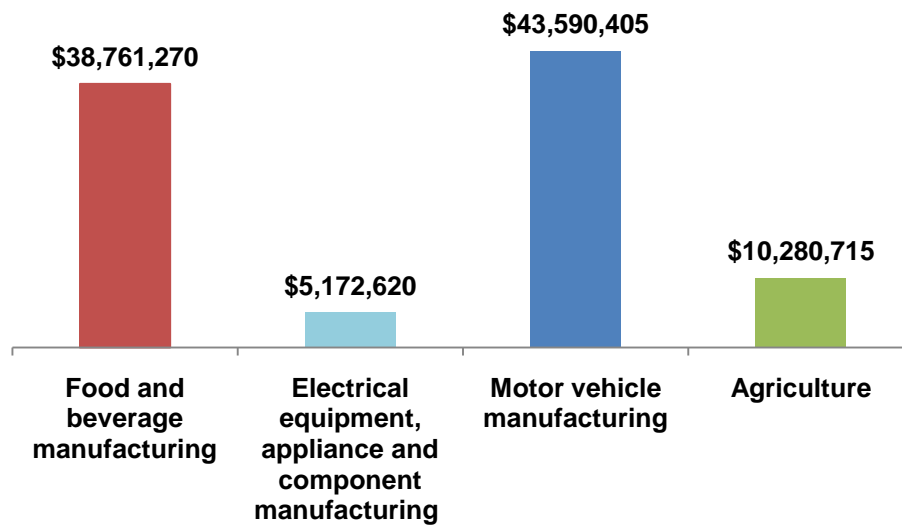
A summary of the key benchmarking findings and graphs is included on the next pages. Supplementary benchmarking comparisons are outlined in Appendix B.

Total Revenues

In 2010 the food and beverage manufacturing sector was the second largest out of all comparator sectors in terms of total revenues in Ontario.

The benchmarking analysis showed that in 2010 the food and beverage manufacturing sector's share of total manufacturing revenues in Ontario was 15%. In comparison, the electrical equipment, appliance and component manufacturing sector's share was 2% and the motor vehicle manufacturing subsector's share was 17%.

Figure 19. Total Revenues by Sector (Value \$'000; 2010)

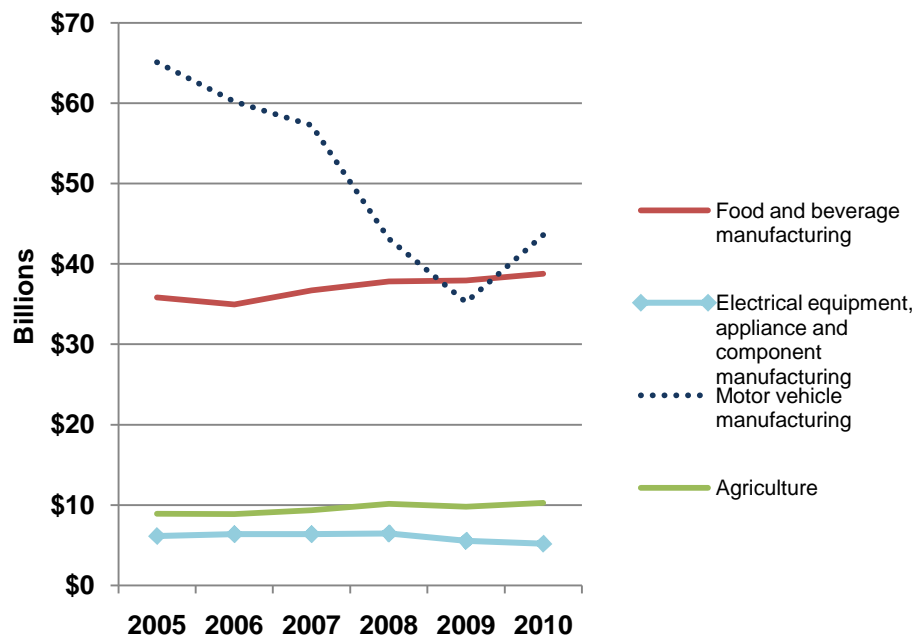


Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010
 Statistics Canada, Total Farm Cash Receipts, 2010⁵⁰

⁵⁰ Please note that all inter-farm sales within the province are excluded from total farm cash receipts estimates.

Between 2005 and 2010, the food and beverage manufacturing sector and the agriculture sector experienced revenue growth of 8% and 15% respectively while the comparator manufacturing sector and subsector experienced decreases. The electrical equipment, appliance and component manufacturing sector and the motor vehicle manufacturing subsector experienced revenue decreases of 16% and 33% respectively. This can be explained by the fact that food is considered a necessity, and the food and beverage manufacturing sector and the agriculture sector therefore tend to be more stable during times of economic instability than other manufacturing sectors.

Figure 20. Total Revenues by Sector (2005-2010)



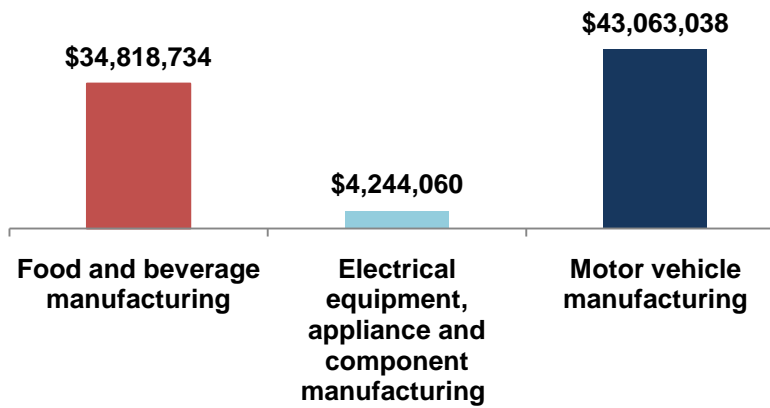
Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2005-2010
 Statistics Canada, Total Farm Cash Receipts, 2005-2010⁵¹

⁵¹ Please note that all inter-farm sales within the province are excluded from total farm cash receipts estimates.

Value of Shipments

As shown in the figure below, in 2010 the food and beverage manufacturing sector's value of shipments surpassed the electrical equipment, appliance and component manufacturing sector, and were slightly less than the motor vehicle manufacturing subsector.

Figure 21. Value of Shipments by Major Manufacturing Sector (Value \$'000; 2010)

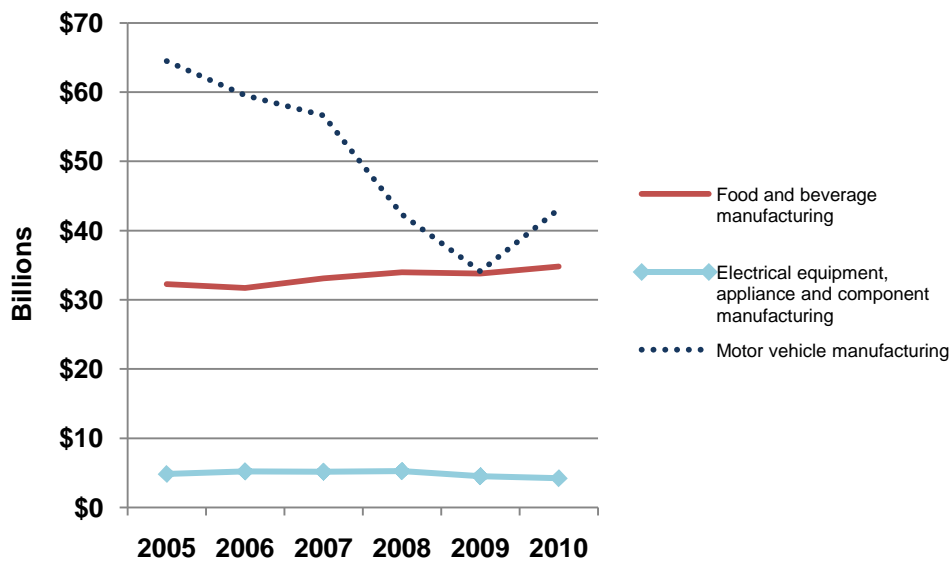


Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010



As shown in the figure below, the food and beverage manufacturing sector has been fairly resilient during times of economic slowdown compared to other major manufacturing sectors in Ontario. Between 2005 and 2010, the value of the food and beverage manufacturing shipments in Ontario increased by 8%. Most food and beverage manufacturing subsectors experienced a positive change in shipments. Some exceptions include beverage manufacturing and fruit and vegetable preserving and specialty food manufacturing, which experienced decreases in shipments. In contrast, the electrical equipment, appliance and component manufacturing sectors and the motor vehicle manufacturing subsector's shipments decreased 13% and 33% respectively.

Figure 22. Value of Shipments by Major Manufacturing Sector (2005-2010)



Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2005-2010



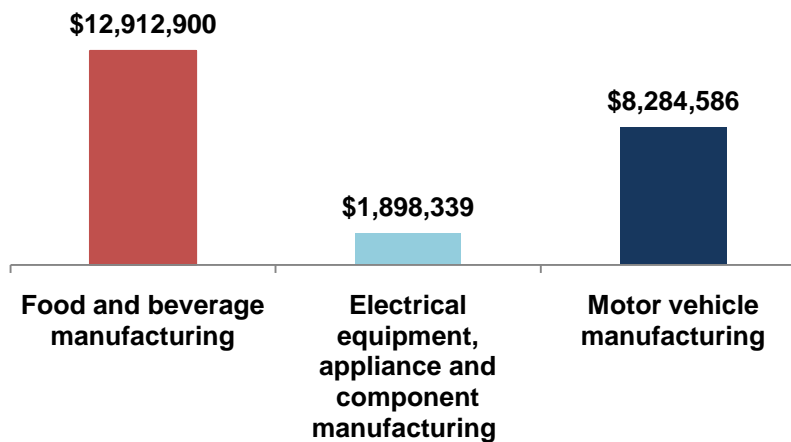
Manufacturing Value-Added

Manufacturing value-added is the value of manufacturing revenues plus net change in the inventory of goods in process and finished goods, less the costs of materials and supplies and of the energy, water and vehicle fuel used.

As shown in the figure below, in 2010 the food and beverage manufacturing sector's manufacturing value-added surpassed electrical equipment, appliance and component manufacturing and motor vehicle manufacturing.

The total food and beverage manufacturing sector's value-added from own manufacturing in 2010 was about \$13 billion or 15% of the total manufacturing value-added in Ontario. The benchmarking analysis showed that value-added in the food and beverage manufacturing sector was 37% of total shipments, compared to 45% and 19% for the electrical equipment, appliance and component manufacturing sector and the motor vehicle manufacturing subsector respectively.

Figure 23. Manufacturing Value-Added by Major Manufacturing Sector (Value \$'000; 2010)

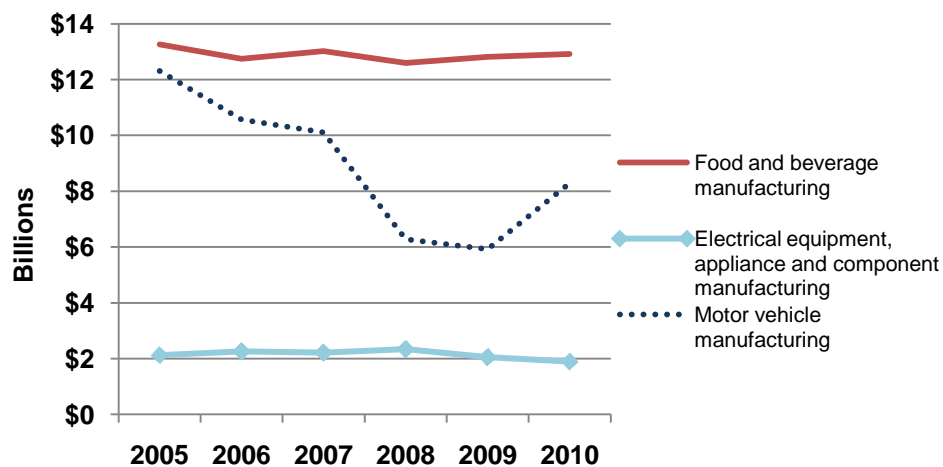


Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010



Between 2005 and 2010, the food and beverage manufacturing sector and the comparator sector and subsector all experienced decreases in manufacturing value-added. The electrical equipment, appliance and component manufacturing sector's and the motor vehicle manufacturing subsector's value-added decreased by 11% and 33% respectively. **The food and beverage manufacturing value-added fell less dramatically than the comparator sector and subsector, with a 3% decrease. The food manufacturing sector (excluding the beverage subsector) even experienced revenue growth of 3%.**

Figure 24. Manufacturing Value-Added by Major Manufacturing Sector (2005-2010)



Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2005-2010

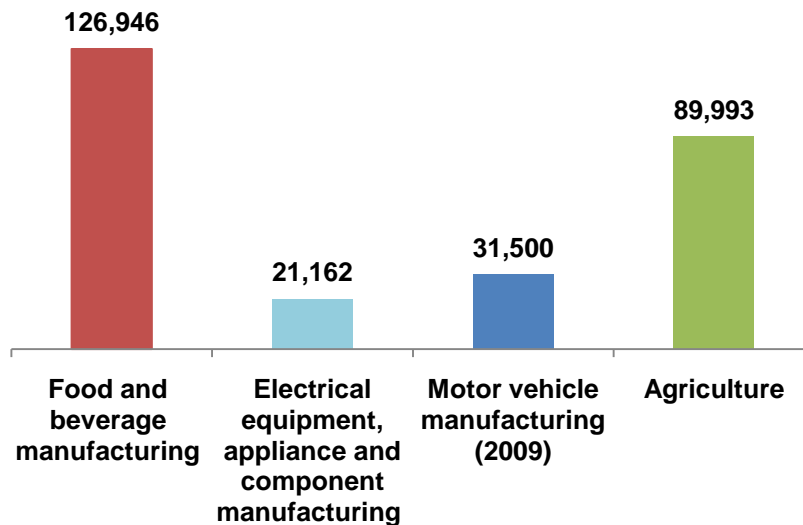


Employment

The food and beverage manufacturing sector was the largest out of the comparator sectors and subsectors in terms of employment in Ontario in 2010.

As shown in the figure below, in 2010 the food and beverage manufacturing sector's employment surpassed electrical equipment, appliance and component manufacturing, motor vehicle manufacturing and the agriculture sector.

Figure 25. Total Direct Employment by Sector⁵²



Source: Statistics Canada, Input Output Model
Automotive Communities Partnership, Automotive Industry Update: Opportunities Abound, 2009⁵³

⁵² Please note that the employment estimates for the food and beverage processing sector, the electrical equipment, appliance and component manufacturing sector and the agriculture sector were derived using a Statistics Canada Input-Output Model. For information on employment data and related assumptions please refer to Appendix D

⁵³ According to the Automotive Communities Partnership study, in 2009, the motor vehicle manufacturing sector in Ontario generated 31,500 direct employees. MNP used the Automotive Communities Partnership direct employment estimates to benchmark Ontario's food and beverage processing sector. For more information on employment data and related assumptions please refer to Appendix D.

8. ECONOMIC IMPACT ANALYSIS

MNP used an input-output model with Statistics Canada multipliers to estimate the economic impacts of the Ontario food and beverage processing sector. Economic impacts of the sector arise from direct expenditures on goods and services (e.g. operating supplies, professional services, etc.), the employment of support staff and the generation of tax revenues for local, provincial and federal governments. To estimate economic impacts, MNP assumed total sector revenues of \$38,761,270.⁵⁴ Statistics Canada provided estimates of the revenues for each of the 10 subsectors.

The table below outlines the revenues that MNP included as inputs in our input-output model.

Table 4. Subsector Revenue

| Subsectors | 2010 Revenue ('000) |
|---------------------------|---------------------------|
| Animal Food | \$2,448,256 |
| Grain and Oilseed Milling | \$4,014,107 |
| Sugar and Confectionery | \$2,620,133 |
| Fruit and Vegetables | \$3,434,659 |
| Dairy Products | \$5,109,119 |
| Meat Products | \$8,399,192 |
| Seafood | \$265,653 |
| Bakeries and Tortilla | \$4,719,412 |
| Other Food Manufacturing | \$3,314,654 |
| Beverage Manufacturing | \$4,436,085 ⁵⁵ |
| Total | \$38,761,270 |

Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010.

⁵⁴ Survey of Manufacturers and Logging. Statistics Canada. 2010.

⁵⁵ Please see Appendix C for a description of the assumptions that we used to estimate beverage manufacturing revenue.



ECONOMIC IMPACTS OF THE SECTOR AS A WHOLE

Below, MNP presents the economic impacts for the food and beverage manufacturing sector as a whole.

Table 5. Ontario Food and Beverage Sector Impacts

| | Output ('000) | GDP ('000) | Employment (FTEs) | Federal Tax ('000) | Provincial Tax ('000) | Municipal Tax ('000) |
|----------------------------|--------------------------|-----------------------|------------------------------|-----------------------------------|--------------------------------------|-------------------------------------|
| Direct | \$38,761,270 | \$12,080,623 | 126,946 | \$1,368,965 | \$858,332 | \$78,116 |
| Indirect and Induced | \$28,062,163 | \$14,136,593 | 234,080 | \$1,669,001 | \$1,036,797 | \$188,622 |
| Total | \$66,823,433 | \$26,217,217 | 361,026 | \$3,037,966 | \$1,895,129 | \$266,738 |

Output

Total direct, indirect and induced output generated by the food and beverage manufacturing sector for the Ontario economy is \$67 billion. Output directly generated by the sector is estimated at \$39 billion. Direct output supports a further \$23 billion in indirect and \$5 billion in induced impacts.

GDP

Total direct, indirect and induced GDP generated by the food and beverage manufacturing sector for the Ontario economy is estimated at \$26 billion. GDP directly generated by the Ontario food and beverage manufacturing sector is estimated at \$12 billion. Direct GDP supports a further \$10 billion in indirect and \$4 billion in induced impacts.

Ontario's nominal GDP in 2010 was equivalent to approximately \$612 billion.⁵⁶ As a result, the food and beverage manufacturing sector's direct GDP impacts represent 2% of the Ontario economy while the total direct, indirect and induced GDP impacts represent 4% of the Ontario economy.

Employment

Approximately 361,026 direct, indirect and induced full-time equivalent positions (FTEs) are generated by food and beverage processors in the Ontario economy including about 127 thousand in direct, 167 thousand in indirect and 67 thousand in induced FTEs. This employment supports close to \$13 billion in direct, indirect and induced wages and salaries, including over \$5 billion in direct, over \$5 billion in indirect and \$2 billion in induced wages and salaries.

⁵⁶ Gross Domestic Product (GDP), Expenditure-Based at Current Prices. Statistics Canada. 2010



With approximately 5 million individuals employed full time in Ontario by the end of 2010,⁵⁷ the sector's estimated direct employment impacts account for 2% of total Ontario full time employment, while the total direct, indirect and induced employment impacts account for 7% of total Ontario full time employment.

Tax Revenue

Aggregate direct, indirect and induced taxes generated by the food and beverage manufacturing sector are estimated at close to \$5 billion. Approximately \$3 billion is estimated to flow to the federal government, \$2 billion to the provincial government and a further \$267 million to municipal governments.

Please note that because tax revenues can regularly change due to modifications in tax policy, the tax revenue impacts in this report are estimates only and subject to change. They should be viewed as approximate in nature.

ECONOMIC IMPACTS BY SUBSECTOR

Below, MNP presents the economic impacts for each of the food and manufacturing subsectors. The largest food and beverage processing subsector in terms of economic impacts is meat product manufacturing, followed by dairy product manufacturing. Meat and dairy product manufacturing together account for about 42% of the total food and beverage manufacturing output; 35% of the total GDP; 44% of the total employment; and 36% of the total tax revenue.

Table 6. Ontario Food and Beverage Subsector Impacts

| | Output ('000) | GDP ('000) | Employment (FTEs) | Federal Taxes ('000) | Provincial Taxes ('000) | Municipal Taxes ('000) |
|----------------------------------|--------------------------|-----------------------|------------------------------|-------------------------------------|--|---------------------------------------|
| Animal Food Manufacturing | | | | | | |
| Direct | \$2,448,256 | \$515,117 | 3,704 | \$53,705 | \$34,368 | \$3,057 |
| Indirect and Induced | \$974,359 | \$487,359 | 6,262 | \$56,266 | \$35,004 | \$6,345 |
| Total | \$3,422,615 | \$1,002,476 | 9,967 | \$109,971 | \$69,372 | \$9,402 |
| Grain and Oilseed Milling | | | | | | |
| Direct | \$4,014,107 | \$622,435 | 3,504 | \$64,850 | \$41,562 | \$7,617 |
| Indirect and Induced | \$2,979,135 | \$1,833,682 | 24,828 | \$217,014 | \$134,892 | \$24,576 |
| Total | \$6,993,242 | \$2,456,117 | 28,332 | \$281,864 | \$176,453 | \$32,193 |

⁵⁷ Labour Force Survey Estimates. Employment Full Time. Statistics Canada. December, 2010.

| | Output ('000) | GDP ('000) | Employment (FTEs) | Federal Taxes ('000) | Provincial Taxes ('000) | Municipal Taxes ('000) |
|--------------------------------|---------------------|--------------------|----------------------|----------------------------|-------------------------------|------------------------------|
| Sugar and Confectionery | | | | | | |
| Direct | \$2,620,133 | \$975,420 | 11,635 | \$113,707 | \$71,117 | \$6,465 |
| Indirect and Induced | \$1,294,969 | \$795,811 | 11,692 | \$93,123 | \$57,676 | \$10,548 |
| Total | \$3,915,102 | \$1,771,231 | 23,326 | \$206,831 | \$128,794 | \$17,013 |
| Fruit and Vegetables | | | | | | |
| Direct | \$3,434,659 | \$931,187 | 14,816 | \$114,560 | \$69,887 | \$13,972 |
| Indirect and Induced | \$2,072,311 | \$1,219,402 | 16,996 | \$141,773 | \$87,846 | \$16,253 |
| Total | \$5,506,970 | \$2,150,589 | 31,811 | \$256,333 | \$157,734 | \$30,225 |
| Dairy Products | | | | | | |
| Direct | \$5,109,119 | \$1,029,893 | 10,043 | \$114,786 | \$72,132 | \$4,280 |
| Indirect and Induced | \$6,722,571 | \$2,570,336 | 58,303 | \$311,868 | \$194,336 | \$33,056 |
| Total | \$11,831,690 | \$3,600,230 | 68,345 | \$426,655 | \$266,468 | \$37,336 |
| Meat Products | | | | | | |
| Direct | \$8,399,192 | \$2,304,006 | 30,058 | \$266,174 | \$164,391 | \$14,824 |
| Indirect and Induced | \$7,590,242 | \$3,341,214 | 61,725 | \$396,976 | \$246,713 | \$43,803 |
| Total | \$15,989,434 | \$5,645,220 | 91,783 | \$663,150 | \$411,104 | \$58,627 |
| Seafood | | | | | | |
| Direct | \$265,653 | \$87,113 | 1,474 | \$10,508 | \$6,538 | \$609 |
| Indirect and Induced | \$179,928 | \$97,500 | 1,214 | \$10,099 | \$6,278 | \$1,460 |
| Total | \$445,581 | \$184,613 | 2,688 | \$20,607 | \$12,816 | \$2,070 |
| Bakeries and Tortilla | | | | | | |
| Direct | \$4,719,412 | \$1,991,792 | 23,658 | \$232,888 | \$145,529 | \$9,102 |
| Indirect and Induced | \$2,459,264 | \$1,518,693 | 21,661 | \$176,980 | \$109,800 | \$21,466 |
| Total | \$7,178,676 | \$3,510,484 | 45,319 | \$409,868 | \$255,329 | \$30,567 |



| | Output ('000) | GDP ('000) | Employment (FTEs) | Federal Taxes ('000) | Provincial Taxes ('000) | Municipal Taxes ('000) |
|---------------------------------|--------------------|--------------------|----------------------|----------------------------|-------------------------------|------------------------------|
| Other Food Manufacturing | | | | | | |
| Direct | \$3,314,654 | \$1,398,924 | 16,616 | \$163,568 | \$102,211 | \$6,393 |
| Indirect and Induced | \$1,727,251 | \$1,066,646 | 15,213 | \$124,301 | \$77,118 | \$15,076 |
| Total | \$5,041,905 | \$2,465,570 | 31,830 | \$287,869 | \$179,329 | \$21,469 |
| Beverage Manufacturing | | | | | | |
| Direct | \$4,436,085 | \$2,224,736 | 11,438 | \$234,219 | \$150,596 | \$11,796 |
| Indirect and Induced | \$2,062,133 | \$1,205,951 | 16,186 | \$140,599 | \$87,134 | \$16,038 |
| Total | \$6,498,218 | \$3,430,687 | 27,624 | \$374,818 | \$237,730 | \$27,834 |

More detailed descriptions of the economic impacts for the 10 subsectors are included in Appendix A.



9. ECONOMIC AND SOCIAL BENEFITS

In addition to the economic impacts reported in Chapter 8, economic, social and community benefits are generated through the activity of the food and beverage processing sector in Ontario. MNP investigated such benefits using interviews with Ontario municipalities asking them how food and beverage processors have impacted the fabric of their communities. MNP also reviewed relevant literature and articles.

This section of the report is not meant to quantify economic and social benefits but instead to provide context and specific examples of the sector's contributions to local economies and communities.

When participants in MNP's telephone interviews were asked to rate the importance of food and beverage processing for the local economy and community on the scale of 1 to 5, where 1 is not at all important and 5 is very important, respondents provided an average rating of 4.7.

ECONOMIC BENEFITS

Economic benefits and their accompanying measures may vary greatly from industry to industry. Specific economic benefits stemming from the Ontario food and beverage processing sector include:

- Attraction of New Businesses and Residents
- Opportunities for Employment and Training Programs
- Creation of Partnerships
- Development of Technology and Innovation
- Area Revitalization and Infrastructure Development
- Benefits for Farming Communities

Attraction of New Business and Residents

Most municipalities surveyed by MNP indicated that food and beverage processing contributes to the attraction of new businesses to their community and other communities throughout the province.

Representatives surveyed indicated that many businesses that support food and beverage processors have become established across the province. The types of businesses cited include those involved in packaging and labelling, transportation, logistics, warehousing and storage, metal fabrication, cleaning services, maintenance, equipment manufacturing, training services, graphic design and financial services.



Food and beverage processing companies often form clusters to take advantage of the support services that are already established. Toronto's food and beverage cluster is one of the largest on the continent. Toronto's food cluster has annual sales in excess of \$18 billion. Furthermore, in 2008 there were over 1,500 food and beverage manufacturing establishments in the region.⁵⁸

Representatives surveyed by MNP indicated that residents are also attracted to communities as a result of employment opportunities in the food and beverage processing sector.

Area Revitalization and Infrastructure Development

The presence of food and beverage processors in communities can have a significant impact on the development of local infrastructure and overall community revitalization. The majority of municipalities surveyed by MNP indicated that food and beverage processing has contributed to local development, infrastructure development and area revitalization.

One good example of area revitalization and local development occurred after spirit producer Hiram Walker & Sons was established in the Windsor Essex region in 1858. As the company grew and prospered over the years, so did the community within which Hiram Walker & Sons operated. The town became known as Walkerville shortly after the company's establishment. In addition to building the company's mill and distillery, the company's founder built homes for his employees, built schools and churches, established his own police force and created public utilities. The town of Walkerville was later annexed by the City of Windsor but maintains its own character.⁵⁹

Food and beverage processing organizations have provided infrastructure that supports community recreation and entertainment. Heinz, for example, donated land in Leamington for the development of an arena. The Heinz Arena is the home of the Jr. B Leamington Flyers and has bowl seating for 1,500 with theatre style seats and an Olympic size ice surface. The Unico Arena is also located in Leamington and has bleacher seating for 200 and an NHL sized rink.⁶⁰ In London, the John Labatt Centre (JLC), a sports-entertainment centre, opened its doors in 2002. The JLC was named after John Labatt, the founder of the Labatt brewery in London. The JLC was built, in part, to be the new downtown home of London's Ontario Hockey League team, the London Knights.

⁵⁸ Key Industry Sector: Food and Beverage. City of Toronto. <http://www.toronto.ca/invest-in-toronto/food.htm>.

⁵⁹ Business and History - Hiram Walker & Sons, Limited. Western Libraries.

<http://www.lib.uwo.ca/programs/companyinformationcanada/ccc-hiramwalker.htm>.

⁶⁰ Residents - Recreation. Municipality of Leamington. http://www.leamington.ca/residents/recreation_heinz.asp.



Opportunities for Employment and Training Programs

Almost all of the municipalities surveyed by MNP indicated that the food and beverage manufacturing industry creates opportunities for unemployed workers, trainees and interns, generating opportunities for employment within the communities they live.

Ontario has a number of training and educational programs to encourage youth and others to enter the food and beverage manufacturing industry. The following table highlights some of the educational institutions in Ontario that offer courses and certificate and degree programs related to food and beverage manufacturing.

Table 7. Examples of Ontario Food and Beverage Manufacturing Courses and Certificates⁶¹

| Institution | Program / Department | Description |
|---|---|--|
| Institute of Food Processing Technology at Conestoga College | Food Processing Techniques | These one-year Ontario College Certificate, 2-year diploma and 3-year apprenticeship programs offered in Cambridge provide training for those interested in starting a career with the food and beverage manufacturing sector. All theoretical training is supported by laboratory practice, food processing experience at a semi-industrial level and through a non-paid placement in industry. |
| Mohawk College | Mechanical Engineering Technology (Co-op) | A three-year cooperative education program that provides specialized training in the field of Mechanical Engineering. Employment opportunities through this degree include those in the food and beverage processing industry. |
| University of Guelph | Department of Food Science | The Department offers diverse and highly rated educational programs, including a Distance Education Certificate; Short Courses in Dairy, Wheat and Meat Processing; and Undergraduate and Graduate programs. The Department also offers a short course in International Food Risk Analysis, a topic relevant to food manufacturing as processors are challenged to reduce health risks associated with food to minimum or non-existent levels. |
| Niagara College | Winery and Viticulture Technician Program | An award winning two-year diploma program that touches on all aspects of the wine industry. Students gain hands-on experience through the Niagara College Teaching Winery. The program helps to prepare graduates to succeed in the wine industry. |

⁶¹ Please note that this is not meant to be an exhaustive list, but instead a listing of select examples.

Some food and beverage processors in Ontario support the educational programs that exist to encourage entry into the industry and provide relevant training. In 2008, for example, Vincor (Canada's largest producer and marketer of wines) pledged a two-year scholarship for incoming Winery and Viticulture Technician students at Niagara College. Under the "Grow Our Own" internship, students selected to receive the scholarships received \$1,500 towards their studies along with internships at Vincor wineries in the Niagara region in the second year of the program.⁶²

Food and beverage processing companies also offer training opportunities to staff and others. For instance, Ipolillito Group has been extensively involved in food safety training, working closely with government agencies in the development of effective Hazard Analysis and Critical Control Points (HACCP) and food safety training programs. The company's operations are vertically integrated to ensure that these extensive food safety and quality control programs are carried throughout the entire process.

Creation of Partnerships

The food and beverage processing sector in Ontario has a long history of collaborating with various organizations. **Almost all of the municipalities surveyed by MNP indicated that partnership opportunities are generated through food and beverage manufacturing.**

An example of collaboration within the sector is a recent partnership between Nestlé Canada, TerraCycle and Cineplex Entertainment. The partnership has enabled movie goers to recycle their used chocolate and candy wrappers by depositing them into special collection boxes located at Cineplex theatres in the Greater Toronto Area. The partnership aims to help keep wrappers out of landfills as Cineplex will send them to TerraCycle to be converted into new eco-products.⁶³

Educational institutions often form partnerships with government, community agencies and the private sector to better understand emerging issues and trends affecting the food and beverage processing sector in Ontario. Collaboration between the University of Windsor, the University of Montreal, Laval University, Simon Fraser University, the Greenhouse and Processing Crops Research Centre and various growers in



After touring water buffalo facilities in Italy, Martin Littkemann and Lori Smith decided to purchase 40 Italian-bred water buffalo and started the Ontario Water Buffalo Company in 2008. Since its inception, the company has purchased an additional 10 Bulgarian water buffalo from Fairburn Farm in British Columbia. The company currently has a herd totalling over 200 buffalo.

The Ontario Water Buffalo Company ships its milk to Quality Cheese in Vaughan where it is transformed into authentic Italian 'Mozzarella di Bufala'. Quality Cheese is the only producer of buffalo milk cheese in Eastern Canada.

The cheese is made locally, is low in cholesterol and calcium rich and offers superior taste and nutritious health benefits. With hundreds of cheese varieties available in the market and only two farmers in Ontario producing buffalo milk, this class of pioneering cheese is a rarity in the province thereby making it highly desirable.

⁶² For the Niagara College Community. In Touch. Summer 2008.

Ontario and Quebec is helping to determine the impact that climate change will have on biological control communities. This work is part of a three-year Natural Sciences and Engineering Research Council of Canada (NSERC) project.⁶⁴

The University of Guelph works with numerous partners to apply research knowledge and address societal problems. One of the University's partners is the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA).⁶⁵ The Agri-Food and Rural Link (KTT Program) is an important part of the partnership. The objectives of the KTT program are to accelerate the transfer of research knowledge into use and facilitate the involvement of users of research into the overall research process.⁶⁶

Partnerships are often formed between food and beverage processors and other private enterprises to help drive competitiveness. In 2009, Dainty Foods collaborated with JMP Engineering to introduce a line of rice products which cut consumer cooking time by more than half, without comprising flavour or nutritional value and without changing ingredients. The ensuing success of the products enabled Dainty Foods to increase its staff by 15% and expand sales. As a result of collaborating with companies such as Dainty Foods, JMP Engineering has been able to grow by an average of 20% annually.⁶⁷

Development of Technology and Innovation

The majority of municipalities surveyed by MNP agree that the Ontario food and beverage processing sector contributes in the area of innovation and technological improvements. Advances in the food and beverage processing sector have been made with respect to product development, processing and distribution.

Representatives surveyed cited a number of examples of innovation in production development. For example, Pillitteri Estates Winery, located in the Niagara region, is the world's largest estate producer of ice wine and is committed to product innovation; the winery has experimented with several grape varieties that had not previously been used in ice wine production. Through this innovation, Pillitteri has become one of the few wineries in the world to successfully produce Riesling Icewine, Cabernet Franc Icewine, Shiraz Icewine and Chardonnay Icewine.⁶⁸

The wine industry has also experienced applications of innovative technology. In 2011, Vincor Canada invested \$1.5 million in a new, state-of-the-art grape press for the company's Niagara Cellars winery located in Niagara Falls. The innovative, Italian-manufactured grape press is the only one of its kind in

⁶³ Mission Possible: Cineplex Recycles Chocolate, Candy Wrappers. InsideToronto.com.

<http://www.insidetoronto.com/article/1266122--mission-possible-cineplex-recycles-chocolate-candy-wrappers>.

⁶⁴ Predators and Pollinators. Greenhouse Canada. <http://www.greenhousecanada.com/content/view/2242/38/>.

⁶⁵ OMAFRA U of G Partnership. University of Guelph. <http://www.uoguelph.ca/research/omafra/>.

⁶⁶ Exhibit Highlights KTT Program, Successful Partnerships. University of Guelph. February 2011.

http://www.uoguelph.ca/research/omafra/partnership/KTT_and_IP.shtml.

⁶⁷ Dainty Foods Adding Workers. The Windsor Star. January 2009.

<http://www.windsorstar.com/health/Dainty+Foods+adding+workers/>

1210361/story.html.

⁶⁸ Pillitteri Icewine. Pillitteri. <http://www.pillitteri.com/icewine/>.



North America and is anticipated to enable the company to increase its processing capacity by more than 30% and add an additional 39 jobs to its existing staff of 120.⁶⁹

Food and beverage processing companies have also been innovative with respect to packaging development. For example, after four years of research Frito Lay Canada introduced the world's first 100% compostable chip bag. The bag is made primarily of plant-based material called polylactic acid that completely breaks down when composted, leaving no waste.⁷⁰ The company believes the new packaging is revolutionary and could potentially have an impact on all processed foods.⁷¹

Many innovations are also being made as a result of the increased health awareness of consumers. New items and categories of food are becoming incorporated into the diets of consumers. In addition, modifications are being made to food and beverages to address the needs of those with allergies, those who are vegetarian or vegan, those who cannot ingest gluten and those who are lactose intolerant. Examples of some of these modifications are discussed later in the report.⁷²

While there are many examples that exist of new product development and process redesign for food and beverage manufacturers, there is also innovation within supporting industries. For instance, Frito Lay Canada is the first company in the Waterloo Region to participate in a provincial test of the double-trailer rig, a super-sized truck that is 36 metres in length. The trucks are appealing to Frito Lay Canada as they are 70% more fuel efficient than single trailer trucks and they reduce the need to hire contract drivers as company drivers are able to move more product at a given time.⁷³

Programs and organizations exist to encourage the development and application of new and innovative technologies. For example, The Institute of Food Processing Technology (IFPT) at Conestoga College, created in 2009 in partnership with AOFP, has the objective to develop a highly skilled workforce by providing training and educational programs that meet the needs of the food and beverage manufacturing sector. The IFPT is Ontario's first and only engineering and technology centre focused on providing leading edge training in a variety of areas including food safety, food processing techniques, electronic instrumentation techniques, automation, robotics, packaging and plant supervision. The IFPT trains students to be prepared for jobs in state of the art food and beverage manufacturing facilities with the latest technology in robotics and automation.⁷⁴

Another example is the SMART Prosperity Now Program, administered by the Canadian Manufacturers and Exporters and funded by the Federal Economic Development Agency for Southern Ontario (FedDev), which aims to foster long term growth in small to medium sized businesses (SMEs). To be eligible, manufacturers must promote growth by moving towards a more sustainable business model through enhancing productivity and integrating new and innovative technologies to products and processes that include alternative energy and clean technology considerations.

⁶⁹ Annual Report Highlights: 2011. Niagara Falls Canada.

⁷⁰ TheRecord.com. <http://catch21.ca/printArticle/678346>

⁷¹ Chip Bags Compostable. Cambridge Times. February 2010. <http://www.cambridgetimes.ca/print/621079>.

⁷² 2010 Toronto Food Sector Update 2010. City of Toronto. December 2010.

⁷³ The Record.com. <http://www.therecord.com/news/local/article/483848--more-double-trailer-transport-trucks-proposed-in-cambridge>.

⁷⁴ The Institute of Food Processing Technology. <http://www.ifpt.ca/aboutus.jsp>



The Guelph Food Technology Centre (GFTC) helps food companies and food entrepreneurs to improve their competitiveness and profitability by assisting them in developing new products and designing new processes. The GFTC has gained the reputation as one of North America's leading research and consulting facilities.⁷⁵

Benefits for Farming Communities

Food and beverage processing has obvious benefits for the Ontario farming community and vice versa. An economic impact study of the Ontario farming industry revealed that:⁷⁶

- 164,400 jobs are created in Ontario through economic activity generated by the farming sector.
- The value of the wages and salaries tied to those jobs is \$7 billion.
- \$3.4 billion in taxes are collected by provincial and federal governments as a result of economic activity generated by farm sector output.

About 15% of the Ontario population lives in rural areas. Farming activity makes significant contributions to Ontario's rural regions and the value of the rural economy is about 13% of Ontario's overall GDP.

Food and beverage processing is the first customer to farmers with Ontario-based food processors buying about 65% of food-related farm production in the province.⁷⁷ In this way, food and beverage processors support and partially enable the economic activity and impacts generated by the Ontario farming industry.

Farming community impacts are multi-faceted and deserve a separate in depth analysis. Such an investigation was out of scope for this study but could be investigated in a future analysis.

⁷⁵ Key Industry Sector: Food and Beverage. Toronto.com. <http://www.toronto.ca/invest-in-toronto/food.htm>.

⁷⁶ Measuring Agriculture's Economic Footprint in Ontario. Food and Farming Canada. October 2010. <http://www.foodandfarmingcanada.com/2010/10/14/measuring-agricultures-economic-footprint-in-ontario>.

⁷⁷ Ontario Ministry of Agriculture, Food and Rural Affairs estimate.



SOCIAL AND COMMUNITY BENEFITS

This section of the report outlines the social and community benefits of the Ontario food and beverage processing sector. These effects address contributions such as:

- Community Involvement and Volunteerism
- Promotion of Healthy Living
- Promotion of Local and Sustainable Farm Production

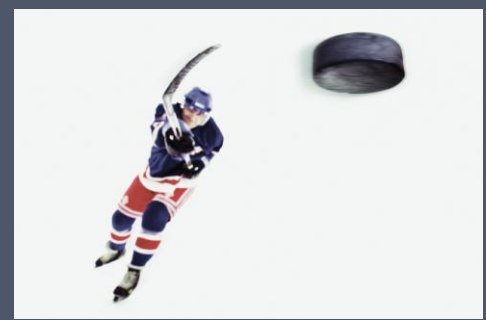
Community Involvement and Volunteerism

All of the municipalities surveyed by MNP indicated that social contributions are generated through the activities of Ontario food and beverage processors in their communities.

Food and beverage manufacturers in Ontario recognize the importance of working to strengthen the cultural and social fabrics of local communities and support its citizens in living enriched lives. Some examples of community involvement include: donating products and providing funding to local organizations (e.g. United Way, food banks, etc.), supporting local sports teams, contributing to scholarship programs, providing support for school programs (e.g. nutrition programs) and providing volunteers for community events.

Grand River Foods, located in the Cambridge region, is well known for giving back to the community. The company supports a number of initiatives, including United Way and food banks. In 2009, Grand River Foods donated more than \$40,000 worth of chicken products to the local food banks. The company is a supporter of youth programs and provides financial assistance to the Boys and Girls Clubs in the communities within which they operate to help advance their efforts. In addition, Grand River Foods supports the Junior Achievements' national program which encourages and develops entrepreneurialism and business leadership amongst youth.

A number of municipalities surveyed by MNP cited local festivals as popular ways in which food and beverage processors engage their local communities. Festivals typically attract local community members, strengthen communities and act as a source of community pride.



Kraft Canada has supported hockey in Canada for over 30 years through sponsorships and grassroots programs. One such program is Kraft Hockeyville, an annual competition developed by CBC sports and sponsored by Kraft Foods along with the NHL and the NHL Players' Association. Over the years, the Kraft Hockeyville partners have provided more than \$1 million towards arena upgrades and equipment as well as local food bank donations.

The central themes of Kraft Hockeyville are community spirit and passion for hockey and Canada. Through the competition, hockey is brought to communities that have a passion and desire to increase exposure and participation in the sport. Furthermore, the competition works to positively impact the lives of communities across Canada, to ensure the longevity of neighbourhood rinks and create legacies of hockey opportunities.

In 2012, Stirling-Rawdon earned the title of Canada's most passionate hockey community. As the winner, the community will host a pre-season NHL game, receive \$100,000 in arena upgrade funding and \$10,000 in food bank donations from Kraft Canada.

Examples of local festivals mentioned by representatives surveyed include:

- **Leamington Tomato Festival** is a three day festival hosted in the “Tomato Capital” of Canada. Features of the festival include live local talent, family activities, foods and crafts. The festival originates from the H.J. Heinz Company of Canada Ltd.’s annual employee picnic which celebrated the area’s tomato harvest. Over time, this tradition has extended to the general public. The tomato is the focus of the festival; locally grown field tomatoes are the largest vegetable crop grown in the region and are used by Heinz Canada in its food products destined for locations worldwide.⁷⁸
- **Burlington’s Rotary Ribfest** has grown to become one of the leading community events in the Greater Toronto Area and Hamilton Area. Every year, Ribfest attracts upwards of 145,000 people from across Canada as well as parts of the United States. The four-day festival features Ribbers from places as far as New Mexico who come to sell food and participate in the competition. In addition, guests of the festival have the opportunity to listen to music from a variety of musicians and purchase local crafts and foods. Ribfest proceeds go to local charities, and community organizations are onsite at the festival, directly involved in fundraising activities. Over the past 13 years, \$1.85 million dollars has been raised for the local community.⁷⁹
- **Tecumseh Corn Festival** is currently in its 37th year. Hot buttered corn on the cob is provided by Bonduelle, a leader in processed vegetables. The festival features live entertainment, midway rides, a vendor village and a parade.



Borne from a belief that everyone should have access to healthy food, in 2011 Campbell Canada introduced Nourish, a complete meal with a full serving of three food groups created to help address the growing issue of hunger in Canada and abroad. Nourish is designed to alleviate hunger in Canada and abroad as well as to provide accessible, nutritious meals to Canadians.

As part of its launch, 100,000 cans of Nourish were donated to Food Banks Canada with the help of key suppliers who donated ingredients and materials. Campbell Canada is hoping to make the product available at key retailers; in doing this, sales of Nourish will be able to fund future donations. The company will also continue to collaborate with industry, government and various international organizations to find ways in which to make Nourish widely available to those in need.

⁷⁸ Leamington Tomator Festival. <http://www.leafingtontomatofestival.com/>.

⁷⁹ Ribfest - 2009 Sponsorship and Advertising Program. Rotary Club of Burlington Lakeshore.

Promotion of Healthy Living

Changing the composition of processed foods is an important means to improve the diets of consumers and therefore help to reduce the prevalence of diet-related diseases. Reformulation initiatives amongst food processors have aimed to improve the nutritional value of products by reducing salt, trans-fatty acids, saturated fatty acids, sugars and overall energy. In addition, modifications are being made with respect to developing products that contain omega 3 and probiotics as well as products that are lactose intolerant or gluten free.

Almost all of the municipalities surveyed by MNP believe processing operations have contributed to increased appreciation for healthy living through healthy food choices for residents. Representatives surveyed cited several examples of ways in which processors in their communities have taken measures to reformulate processed foods in ways that make them healthier, while at the same time remain appealing to consumers.

Voortman Cookies of Burlington has been producing quality cookies since 1951. In 2004, Voortman Cookies was the first major cookie company to remove trans fat from all of their products, without compromising on taste.⁸⁰

Following the lead of Voortman Cookies, in 2008 Girl Guides of Canada introduced new and improved classical chocolate and vanilla cookies with 90% less trans fat than the original cookies.⁸¹ Girl Guides of Canada worked closely with its cookie baker, Dare Foods, to reduce the trans fat content in the classic cookies while maintaining the same great taste.

Kellogg's Canada is another organization that has been a long supporter of the promotion of healthy living. More than a century ago, the company's founder, W.K. Kellogg's, said, "We are a company of dedicated people making quality products for a healthier world." Kellogg's Canada is committed to health and nutrition through its innovative products that aim to meet consumer needs for health, wellness and great taste. In 2011, Kellogg's Canada debuted Kellogg's Fibre Plus cereal, Special K Oats and Honey cereal, Special K Chocolatey Delight cereal bars and Kashi Soft-Baked bars to help meet the growing nutritional and health demands of Canadian consumers.⁸²

Kellogg's Canada's commitment to healthy eating is also evidenced by its commitment to the nutrition literacy of Canadians. In 2010, Kellogg's Canada announced its support of the Nutrition Facts Education Campaign (NFEC), an innovative collaboration of Health Canada and Food and Consumer Product of Canada (FCPC). The objective of the campaign is to enable Canadians to understand and use the Nutrition Facts table on packaged foods and make informed choices.⁸³

⁸⁰ Operating a Distributorship. Voortman Cookies.

<http://www.voortman.com/careers/images/Voortman%20Distributorship%20Brochure1.pdf>.

⁸¹ Girl Guides of Canada Introduces Reduced Trans-Fat Cookies! Girl Guides of Canada.

http://www.girlguides.ca/uploads/File/cookies/cookies_in_the_media/Who_Wants_Girl_Guide_Cookies_PR.pdf.

⁸² Kellogg's Canada Debuts Production Innovation for 2011. Kellogg's.

<http://www2.kelloggs.ca/News/NewsDetail.aspx?id=4720&s=&y=&p=0>.

⁸³ Kellogg's Strengthens Commitment to Nutrition Literacy of Canadians, Announces Support of Nutrition Facts Education Campaign. Kellogg's. <http://www.newswire.ca/en/story/615239/kellogg-strengthens-commitment-to-nutrition-literacy-of-canadians-announces-support-of-nutrition-facts-education-campaign>.



Promotion of Local and Sustainable Farm Production

Local food promotion is one of the strongest movements in the food and beverage processing sector. Consumers are becoming more aware of the benefits of purchasing and consuming local products; local products are often fresher, safer, healthier and of higher quality. As a result, food and beverage processors are increasingly conscious of the inputs they select for use in manufacturing their own products. The majority of representatives surveyed by MNP indicated that processing operations contribute to an increase in or retention of local sustainable farm production.

There are many examples of food and beverage processing companies sourcing products locally and sustainably. Heinz, for instance, works to incorporate local farm inputs into its processed products. The plant in Leamington, which is the second largest Heinz plant in the world, produces about 96 million bottles of ketchup each year. Tomatoes used in the production of ketchup at the plant in Leamington are all locally grown. The Heinz plant in Leamington is important for local farmers; during the busy season, about 150 to 175 loads (or 6,000 tons) of locally grown tomatoes are supplied to the plant each day.⁸⁴



Cavendish Farms, located in Wheatley, is committed to supporting the local suppliers. More specifically, Cavendish potato products are made from potatoes grown by local farmers less than thirty minutes away and cheese products are made using natural cheese made in Ontario and Quebec. Similarly, all of the onions and zucchinis used in Cavendish products are grown by local farmers less than two hours away.

In an effort to demonstrate commitment to sustainable agriculture, Heinz has also created its own hybrid tomato seed program and works to protect grower's health by educating them about safe handling processes for approved chemicals and emphasizing the importance of personal protective equipment. Heinz states that the company believes in developing long-term relationships with their growers and does this by spending countless hours becoming familiarized with farmers and their operations. In addition, Heinz requires traceability systems for all products.⁸⁵

From Farm to Table Canada is a manufacturer of popcorn that is also devoted to the promotion of locally grown foods. The factory is located less than 100 kilometres from its growers. Farm to Table Canada works closely with the crown growers to ensure growers conserve energy and cut greenhouse gas emissions, protect and enhance wildlife habitats, employ sustainable production systems and ensure safe and fair conditions.

Regions have also long recognized the importance of promoting local and sustainable farm production. One such region is Windsor Essex that launched a buy-local campaign in 2009. The "*Grown Right Here. Look for Local*" campaign aims to promote buying local to area consumers and to create a stronger

⁸⁴ After 100 years, Heinz Plant Looks to the Future. Windsor Star. September 2009.

<http://www2.canada.com/windsorstar/news/story.html?id=6451590e-24c7-4021-b69b-6b26e23488b1>.

⁸⁵ Heinz Canada. www.heinz.ca.



demand for local products. The campaign is supported by a number of project partners that work together to showcase the abundance of locally grown produced and processed food. The campaign aims to encourage consumers to become more aware of local producers, processors, wineries, abattoirs and bakeries. By supporting the consumption of local products, the economy is stimulated and environmentally and socially responsible behaviour is encouraged.



10. INTERPRETATION OF DATA

MNP encountered two areas where the desired data was not readily available and had to be further interpreted and analyzed. The identified areas and our mitigation strategies are described in the table below.

Table 8. Interpretation of Data

| Desired Data | Interpretation Strategy |
|--|---|
| <p>Beverage Manufacturing Data. Statistics Canada does not publish key industry statistics for Ontario beverage manufacturing alone. The agency only publishes aggregated beverage manufacturing (NAICS code 3121) and tobacco manufacturing (NAICS code 3122) data.</p> <p>For this study, MNP needed to separate beverage and tobacco statistics to report on the size and impacts of the Ontario beverage processing subsector and hence the food and beverage processing sector as a whole.</p> | <p>MNP extrapolated the beverage manufacturing data from the aggregated beverage and tobacco manufacturing data using a three-step process. For more information on the process and related assumptions please refer to Appendix D.</p> |
| <p>Municipal Tax Impacts. Statistics Canada Interprovincial Input-Output Model does not report municipal tax multipliers.</p> <p>For this study, MNP needed to calculate municipal tax multipliers in order to estimate municipal tax revenue generated by the Ontario food and beverage manufacturing sector.</p> | <p>MNP used the “Indirect Taxes on Production” multiplier from the input-output model to approximate municipal tax impacts. For more information on the process and definitions please refer to Appendix D.</p> |



APPENDICES



APPENDIX A – SUBSECTOR PROFILES

This appendix contains the definitions, profiles, key statistics and economic impacts for each of the 10 food and beverage subsectors in Ontario. The subsector definitions are based on Industry Canada information, the statistics are based on Statistics Canada and the economic impacts were estimated by MNP using the procedure and assumptions outlined in Appendix D.



ANIMAL FOOD

This subsector comprises establishments primarily engaged in manufacturing food and feed for animals, including pets. Sample activities include:

- Manufacturing dog and cat feed supplements.
- Manufacturing dog and cat food from purchased meat and poultry.
- Manufacturing dog and cat pet food.
- Manufacturing animal feeds, supplements and concentrates.
- Manufacturing complete livestock feed.
- Milling grain to make livestock feed.

The table below summarizes key subsector statistics. More detailed explanations of each statistic follow.

Table 9. Animal Food Manufacturing Subsector Profile

| ANIMAL FOOD | | |
|---|----------------|---|
| | Value \$('000) | Percentage of Food and Beverage Manufacturing |
| Number of establishments | 179 | 6% |
| Total revenue | \$2,448,256 | 6% |
| Value of shipments | \$1,949,379 | 6% |
| Manufacturing value-added | \$468,576 | 4% |
| Total expenses | \$2,195,733 | 6% |
| Total number of employees ⁸⁶ | 3,704 | 3% |
| Total wages and salaries ⁸⁷ | \$147,772 | 3% |
| Exports | \$158,609 | 2% |
| Imports | \$500,223 | 4% |

Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010.
 Industry Canada, International Trade Data, 2010.
 Statistics Canada, Input-Output Model.

⁸⁶ For more information on the employment, wages and salaries data and related assumptions please see Appendix D.

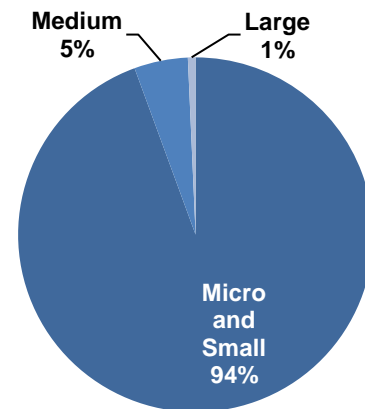
⁸⁷ Ibid.



Number of Establishments

According to the Canadian Business Patterns Database, an estimated 30% of Canadian animal food manufacturing establishments are located in Ontario. In 2010, the breakdown of employer establishments in the animal food manufacturing subsector in Ontario was as follows: 94% of them were micro and small establishments employing from 1 to 99 people, 5% were medium sized establishments employing 100 to 499 people and under 1% were large sized establishments employing more than 500 people.⁸⁸

Figure 26. Animal Food Manufacturing Establishments by Size



Revenues and Manufacturing Value-Added

In 2010, subsector sales amounted to over \$2 billion, making up about 6% of Ontario's food and beverage manufacturing sales. Animal food manufacturing subsector sales increased about 19% from about \$2.0 billion in 2005 to \$2.4 billion in 2010. Manufacturing revenues per production worker for this subsector increased from \$870 thousand in 2005 to over \$1 million in 2010. The total food and beverage manufacturing sector's value added from own manufacturing in 2010 was about \$13 billion, with animal food manufacturing accounting for \$469 million or about 4% of the total. In 2010, Ontario's animal food manufacturing establishments produced close to \$2 billion in shipments, representing 6% of the total of Ontario's food and beverage manufacturing value of shipments.

Expenses

In 2010, the total expenses by the animal food manufacturing subsector amounted to over \$2 billion, of which 72% were considered manufacturing costs. In 2010, the animal food manufacturing subsector spent \$91 million on production wages; \$44 million on energy, water and vehicle fuel; and over \$1 billion on materials and supplies for manufacturing activities.

International Trade

In 2010, Ontario's animal food manufacturing subsector exports were \$159 million, accounting for 2% of Ontario's total annual food and beverage manufacturing exports. In the same year, subsector imports were \$500 million, accounting for over 4% of Ontario's total food and beverage manufacturing imports.

⁸⁸ Canadian Business Patterns Database. Statistics Canada. December 2010.

Economic Impacts

The animal food manufacturing subsector generates over \$3 billion in direct, indirect and induced economic output, including \$1 billion in nominal GDP. Approximately 9,967 direct, indirect and induced jobs are generated by the animal food subsector, including about 3,704 in direct, and 6,262 in indirect and induced FTE's. This employment supports about \$394 million in direct, indirect and induced wages and salaries, including close to \$148 million in direct and \$246 million in indirect and induced wages and salaries. Aggregate direct, indirect and induced taxes generated by the animal food manufacturing subsector are estimated at close to \$189 million.



GRAIN AND OILSEED MILLING

This subsector comprises establishments primarily engaged in milling grains and oilseeds; refining and blending fats and oils; and making breakfast cereal products.

Sample products include:

- Cereal grain flour, corn flour, dough, flour mixes (e.g., for pancakes, cakes, biscuits and doughnuts), fruit flour and vegetable flour.
- Malt from barley, rye or other grains.
- Corn sweeteners (e.g. glucose, dextrose and fructose) and corn oil.
- Soybean cakes, meals and protein isolates and concentrates.

The table below summarizes key subsector statistics. More detailed explanations of each statistic follow.

Table 10. Grain and Oilseed Manufacturing Subsector Profile

| GRAIN AND OILSEED MILLING | | |
|---|----------------|---|
| | Value \$('000) | Percentage of Food and Beverage Manufacturing |
| Number of establishments | 63 | 2% |
| Total revenue | \$4,014,107 | 10% |
| Value of shipments | \$3,483,566 | 10% |
| Manufacturing value-added | \$1,012,451 | 8% |
| Total expenses | \$3,532,263 | 10% |
| Total number of employees ⁸⁹ | 3,504 | 3% |
| Total wages and salaries ⁹⁰ | \$172,911 | 3% |
| Exports | \$936,854 | 14% |
| Imports | \$1,464,825 | 12% |

Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010.
 Industry Canada, International Trade Data, 2010.
 Statistics Canada, Input-Output Model.

⁸⁹ For more information on the employment, wages and salaries data and related assumptions please see Appendix D.

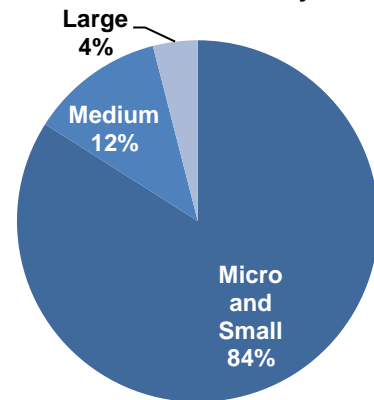
⁹⁰ Ibid.



Number of Establishments

According to the Canadian Business Patterns Database, an estimated 30% of Canadian grain and oilseed milling establishments are located in Ontario, followed by Quebec. In 2010, the breakdown of employer establishments in the grain and oilseed manufacturing subsector in Ontario was as follows: 84% of them were considered micro and small establishments employing from 1 to 99 people, 12% were medium sized establishments employing from 100 to 499 people and 4% were large sized establishments employing more than 500 people.⁹¹

Figure 27. Grain and Oilseed Manufacturing Establishments by Size



Revenues and Manufacturing Value-Added

In 2010, the grain and oilseed milling subsector represented 10% of the \$39 billion food and beverage manufacturing sector, generating over \$4 billion in sales annually. From 2005 to 2010, total revenue in the grain and oilseed milling subsector in Ontario increased by 8% from \$3.7 billion to \$4.0 billion. The total food and beverage manufacturing sector's value added from own manufacturing in 2010 was about \$13 billion, with grain and oilseed milling accounting for over \$1 billion or 8% of the total. Manufacturing revenues per production worker for this subsector increased from \$1.0 million in 2005 to \$1.1 million in 2010. In 2010, Ontario's grain and oilseed manufacturing establishments produced about \$3 billion in shipments representing 10% of the total of Ontario's food and beverage manufacturing value of shipments.

Expenses

In 2010, the total expenses by the grain and oilseed manufacturing subsector amounted close to \$4 billion, of which 75% were considered manufacturing costs. In 2010, the subsector spent about \$165 million on production wages; \$111 million on energy, water and vehicle fuel; and about \$2 billion on materials and supplies for manufacturing activities.

International Trade

In 2010 Ontario's grain and oilseed manufacturing subsector exports were about \$937 million, accounting for 14% of Ontario's total annual food and beverage manufacturing exports. In the same year, Ontario's grain and oilseed manufacturing subsector imports were over \$1 billion, accounting for 12% of Ontario's total food and beverage manufacturing imports.

⁹¹ Canadian Business Patterns Database. Statistics Canada. December 2010.

Economic Impacts

The grain and oilseed milling subsector generates close to \$7 billion in direct, indirect and induced economic output, including over \$2 billion in nominal GDP. Approximately 28,332 direct, indirect and induced jobs are generated by the grain and oilseed milling subsector, including about 3,504 direct, and 24,828 in indirect and induced FTE's. This employment supports about \$1.1 billion in direct, indirect and induced wages and salaries, including close to \$173 million in direct and \$961 million in indirect and induced wages and salaries. Aggregate direct, indirect and induced taxes generated by the grain and oilseed milling subsector are estimated at close to \$491 million.



SUGAR AND CONFECTIONERY

This subsector comprises establishments primarily engaged in manufacturing sugar and confectionery products. Sample activities include:

- Manufacturing raw sugar, sugar syrup and refined sugar from sugar cane.
- Manufacturing raw cane sugar or sugar beets.
- Shelling, caramelizing, syrup kneading, extruding, compressing, stamping or otherwise manufacturing starch goods.
- Roasting and grinding cacao beans into chocolate cacao products and chocolate confectionery.
- Manufacturing chocolate confectionery from purchased chocolate.
- Manufacturing non-chocolate confectionery.

The table below summarizes key subsector statistics. More detailed explanations of each statistic follow.

Table 11. Sugar and Confectionary Product Manufacturing Subsector Profile

| SUGAR AND CONFECTIONERY | | |
|---|----------------|---|
| | Value \$('000) | Percentage of Food and Beverage Manufacturing |
| Number of establishments | 136 | 5% |
| Total revenue | \$2,620,133 | 7% |
| Value of shipments | \$2,416,756 | 7% |
| Manufacturing value-added | \$923,509 | 7% |
| Total expenses | \$2,303,589 | 7% |
| Total number of employees ⁹² | 11,635 | 9% |
| Total wages and salaries ⁹³ | \$463,448 | 9% |
| Exports | \$866,007 | 13% |
| Imports | \$1,072,744 | 9% |

Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010.
 Industry Canada, International Trade Data, 2010.
 Statistics Canada, Input-Output Model.

⁹² For more information on the employment, wages and salaries data and related assumptions please see Appendix D.

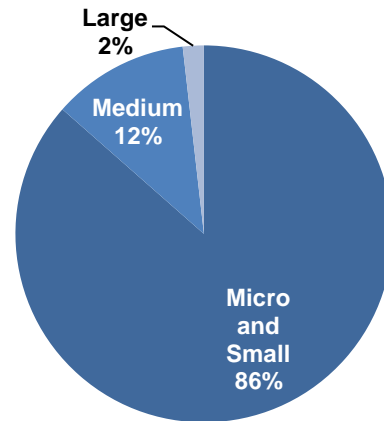
⁹³ Ibid.



Figure 28. Sugar and Confectionary Manufacturing Establishments by Size

Number of Establishments

According to the Canadian Business Patterns Database, an estimated 39% of Canadian sugar and confectionary product manufacturing establishments are located in Ontario, followed by Quebec and British Columbia. In 2010, the breakdown of employer establishments in the sugar and confectionary product manufacturing subsector in Ontario was as follows: 86% of them were considered micro and small establishments employing from 1 to 99 people, 12% were medium sized establishments employing from 100 to 499 people and 2% were large sized establishments employing more than 500 people.⁹⁴



Revenues and Manufacturing Value-Added

In 2010, subsector sales amounted to nearly \$3 billion, making up 7% of Ontario's food and beverage manufacturing sales. Subsector sales increased 8% from \$2.4 billion in 2005 to \$2.6 billion in 2010. The total food and beverage manufacturing sector's value added from own manufacturing in 2010 was about \$13 billion, with sugar and confectionary accounting for about \$924 billion or 7% of the total. Manufacturing revenues per production worker for this subsector increased from \$396 thousand in 2005 to \$618 thousand in 2010. In 2010, Ontario's sugar and confectionary product manufacturing establishments produced about \$2 billion in shipments, representing 7% of the total of Ontario's food and beverage manufacturing value of shipments.

Expenses

In 2010, the total expenses by the sugar and confectionary product manufacturing subsector amounted to over \$2 billion, of which 73% were considered manufacturing costs. In 2010, the subsector spent about \$184 million on production wages; \$68 million on energy, water and vehicle fuel; and over \$1 billion on materials and supplies for manufacturing activities.

International Trade

In 2010, Ontario's sugar and confectionary product manufacturing subsector exports were about \$866 million, accounting for 13% of Ontario's total annual food and beverage manufacturing exports. In the same year, subsector imports were over \$1 billion, accounting for 9% of Ontario's total food and beverage manufacturing imports.

⁹⁴ Canadian Business Patterns Database. Statistics Canada. December 2010.

Economic Impacts

The sugar and confectionery manufacturing subsector generated approximately \$4 billion in direct, indirect and induced economic output, including close to \$2 billion in nominal GDP. Approximately 23,326 direct, indirect and induced jobs are generated by the sugar and confectionery manufacturing subsector including about 11,635 direct and 11,692 in indirect and induced FTE's. This employment supports close to \$895 million in direct, indirect and induced wages and salaries, including about \$463 million in direct and \$431 million in indirect and induced wages and salaries. Aggregate direct, indirect and induced taxes generated by the sugar and confectionery manufacturing subsector are estimated at close to \$353 million.



FRUIT AND VEGETABLE PRESERVING AND SPECIALITY FOOD MANUFACTURING

This subgroup comprises establishments primarily engaged in manufacturing:

- Frozen fruits and vegetables.
- Frozen entrées and side dishes of several ingredients, except seafood.
- Fruits and vegetables preserved by pickling, canning, dehydrating and similar processes.

The table below summarizes key subsector statistics. More detailed explanations of each statistic follow.

Table 12. Fruit and Vegetable Manufacturing Subsector Profile

| FRUIT AND VEGETABLE | | |
|---|----------------|---|
| | Value \$('000) | Percentage of Food and Beverage Manufacturing |
| Number of establishments | 194 | 7% |
| Total revenue | \$3,434,659 | 9% |
| Value of shipments | \$2,627,466 | 8% |
| Manufacturing value-added | \$1,099,304 | 9% |
| Total expenses | \$2,971,256 | 9% |
| Total number of employees ⁹⁵ | 14,816 | 12% |
| Total wages and salaries ⁹⁶ | \$627,840 | 12% |
| Exports | \$582,824 | 9% |
| Imports | \$1,610,926 | 14% |

Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010.
 Industry Canada, International Trade Data, 2010.
 Statistics Canada, Input-Output Model.

⁹⁵ For more information on the employment, wages and salaries data and related assumptions please see Appendix D.

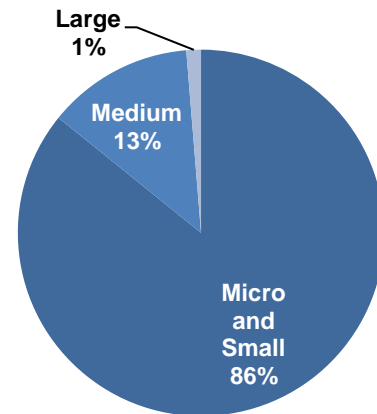
⁹⁶ Ibid.



Number of Establishments

According to the Canadian Business Patterns Database, an estimated 45% of Canadian fruit and vegetable processors and specialty food manufacturing establishments are located in Ontario, followed by Quebec and British Columbia. In 2010, the breakdown of employer establishments in the subsector in Ontario was as follows: 86% of them were considered micro and small establishments employing from 1 to 99 people, 13% were medium sized establishments employing from 100 to 499 people and 1% were large sized establishments employing more than 500 people.⁹⁷

Figure 29. Fruit and Vegetable Manufacturing Establishments by Size



Revenues and Manufacturing Value-Added

In 2010, subsector sales amounted to over \$3 billion, making up 9% of Ontario's food and beverage manufacturing sales. Subsector sales slightly decreased by 3% from \$3.5 billion in 2005 to \$3.4 billion in 2010. The total food and beverage manufacturing sector's value added from own manufacturing in 2010 was about \$13 billion, with fruit and vegetable processors and specialty food manufacturing accounting for over \$1 billion or 9% of the total. Manufacturing revenues per production worker for this subsector increased from \$387 thousand in 2005 to \$446 thousand in 2010. In 2010, subsector establishments produced close to \$3 billion in shipments representing 8% of the total of Ontario's food and beverage manufacturing value of shipments.

Expenses

In 2010, the total expenses by the subsector amounted close to \$3 billion, of which 58% were considered manufacturing costs. In 2010, the subsector spent about \$207 million on production wages; \$79 million on energy, water and vehicle fuel; and over \$1 billion on materials and supplies for manufacturing activities.

International Trade

In 2010, Ontario's fruit and vegetable and specialty food manufacturing subsector exports were about \$583 million, accounting for 9% of Ontario's total annual food and beverage manufacturing exports. In the same year, subsector imports were close to \$2 billion, accounting for 14% of Ontario's total food and beverage manufacturing imports.

⁹⁷ Canadian Business Patterns Database. Statistics Canada. December 2010.

Economic Impacts

The fruit and vegetable manufacturing subsector generated close to \$6 billion in direct, indirect and induced economic output, including over \$2 billion in nominal GDP. Approximately 31,811 direct, indirect and induced jobs are generated by the fruit and vegetable manufacturing subsector, including about 14,816 in direct and 16,996 in indirect and induced FTE's. This employment supports close to \$1.3 billion in direct, indirect and induced wages and salaries, including close to \$628 million in direct and \$653 million in indirect and induced wages and salaries. Aggregate direct, indirect and induced taxes generated by the fruit and vegetable manufacturing subsector are estimated at \$444 million.



DAIRY PRODUCTS

This subsector comprises establishments primarily engaged in manufacturing dairy products, including: milk, processed milk products, butter, cheese, ice cream, frozen dairy desserts and dry and condensed dairy products.

The table below summarizes key subsector statistics. More detailed explanations of each statistic follow.

Table 13. Dairy Product Manufacturing Subsector Profile

| DAIRY PRODUCTS | | |
|---|----------------|---|
| | Value \$('000) | Percentage of Food and Beverage Manufacturing |
| Number of establishments | 329 | 11% |
| Total revenue | \$5,109,119 | 13% |
| Value of shipments | \$4,452,705 | 13% |
| Manufacturing value-added | \$966,278 | 7% |
| Total expenses | \$4,854,698 | 14% |
| Total number of employees ⁹⁸ | 10,043 | 8% |
| Total wages and salaries ⁹⁹ | \$436,888 | 8% |
| Exports | \$185,200 | 3% |
| Imports | \$292,775 | 2% |

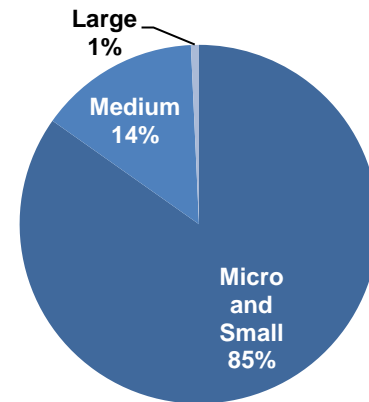
Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010.
 Industry Canada, International Trade Data, 2010.
 Statistics Canada, Input-Output Model.

⁹⁸ For more information on the employment, wages and salaries data and related assumptions please see Appendix D.

⁹⁹ Ibid.



Figure 30. Dairy Manufacturing Establishments by Size



Number of Establishments

According to the Canadian Business Patterns Database, an estimated 29% of Canadian dairy manufacturing establishments are located in Ontario, followed by Alberta and Quebec. In 2010, the breakdown of employer establishments in the dairy manufacturing subsector in Ontario was as follows: 85% of them were considered micro and small establishments employing from 1 to 99 people, 14% were medium sized establishments employing from 100 to 499 people and 1% were large sized establishments employing more than 500 people.¹⁰⁰ From 2005 to 2010, the number of establishments in the subsector in Ontario increased by 28% from 235 to 329.

Revenues and Manufacturing Value-Added

In 2010, subsector sales amounted to over \$5 billion, making up 13% of Ontario's food and beverage manufacturing sales. Subsector sales increased by 7% from \$4.8 billion in 2005 to \$5.0 billion in 2010. Manufacturing revenues per production worker for this subsector increased from \$703 thousand in 2005 to \$809 thousand in 2010. The total food and beverage manufacturing sector's value added from own manufacturing in 2010 was about \$13 billion, with dairy manufacturing accounting for \$966 million or 7% of the total. In 2010, Ontario's dairy manufacturing establishments produced over \$4 billion in shipments, representing 13% of the total of Ontario's food and beverage manufacturing value of shipments.

Expenses

In 2010, the total expenses by the dairy products manufacturing subsector amounted close to \$5 billion, of which 76% were considered manufacturing costs. In 2010, the subsector spent about \$237 million on production wages; \$79 million on energy, water and vehicle fuel; and over \$3 billion on materials and supplies for manufacturing activities.

International Trade

In 2010, Ontario's dairy manufacturing subsector exports were \$185 million, accounting for 3% of Ontario's total annual food and beverage manufacturing exports. In the same year, subsector imports were about \$293 billion, accounting for 2% of Ontario's total food and beverage manufacturing imports.

¹⁰⁰ Canadian Business Patterns Database. Statistics Canada. December 2010.

Economic Impacts

The dairy product manufacturing subsector generated close \$12 billion in direct, indirect and induced economic output, including close to \$4 billion in nominal GDP. Approximately 68,345 direct, indirect and induced jobs are generated by the dairy product manufacturing subsector, including about 10,043 in direct and 58,303 in indirect and induced FTE's. This employment supports close to \$1.8 billion in direct, indirect and induced wages and salaries, including close to \$437 million in direct and \$1.3 billion in indirect and induced wages and salaries. Aggregate direct, indirect and induced taxes generated by the dairy product manufacturing subsector are estimated at \$730 million.



MEAT PRODUCTS

This industry group comprises establishments primarily engaged in manufacturing meat products. Sample activities include:

- Slaughtering animals, including poultry and small game.
- Preparing processed meats and meat by-products from poultry, small game and carcasses.
- Rendering animal fat, bones and meat scraps.

The table below summarizes key subsector statistics. More detailed explanations of each statistic follow.

Table 14. Meat Manufacturing Subsector Profile

| MEAT PRODUCTS | | |
|--|----------------|---|
| | Value \$('000) | Percentage of Food and Beverage Manufacturing |
| Number of establishments | 349 | 12% |
| Total revenue | \$8,399,192 | 22% |
| Value of shipments | \$8,137,663 | 23% |
| Manufacturing value-added | \$2,414,751 | 19% |
| Total expenses | \$7,722,982 | 23% |
| Total number of employees ¹⁰¹ | 30,058 | 24% |
| Total wages and salaries ¹⁰² | \$1,275,205 | 24% |
| Exports | \$1,161,708 | 17% |
| Imports | \$1,806,722 | 15% |

Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010.
 Industry Canada, International Trade Data, 2010.
 Statistics Canada, Input-Output Model.

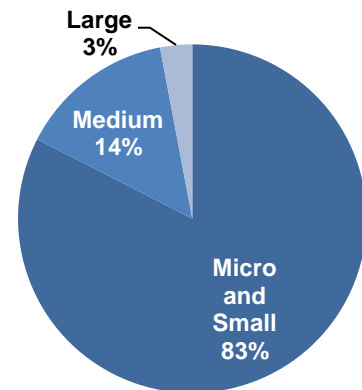
¹⁰¹ For more information on the employment, wages and salaries data and related assumptions please see Appendix D.

¹⁰² Ibid.

Number of Establishments

According to the Canadian Business Patterns Database, an estimated 32% of Canadian meat manufacturing establishments are located in Ontario, followed by Quebec and Alberta. In 2010, the breakdown of employer establishments in the meat manufacturing subsector in Ontario was as follows: 83% of them were considered micro and small establishments employing between 1 to 99 people, 14% were medium sized establishments employing from 100 to 499 people and 3% were large sized establishments employing more than 500 people.¹⁰³

Figure 31. Meat Product Manufacturing Establishments by Size



Revenues and Manufacturing Value-Added

In 2010, subsector sales amounted to over \$8 billion, making up 22% of Ontario's food and beverage manufacturing sales.

Subsector sales increased 11% from \$7.5 billion in 2005 to \$8.3 billion in 2010. The total food and beverage manufacturing sector's value added from own manufacturing in 2010 was about \$13 billion, with meat manufacturing accounting for over \$2 billion or 19% of the total. Manufacturing revenues per production worker for this subsector increased from \$359 thousand in 2005 to \$406 thousand in 2010. In 2010, Ontario's meat product manufacturing establishments produced over \$8 billion in shipments, representing 23% of the total of Ontario's food and beverage manufacturing value of shipments.

Expenses

In 2010, the total expenses by the meat product manufacturing subsector amounted close to \$8 billion, of which 83% were considered manufacturing costs. In 2010, the subsector spent about \$671 million on production wages; \$117 million on energy, water and vehicle fuel; and close to \$6 billion on materials and supplies for manufacturing activities.

International Trade

In 2010, Ontario's meat product manufacturing subsector exports were over \$1 billion, accounting for 17% of Ontario's total annual food and beverage manufacturing exports. In the same year, subsector imports were close to \$2 billion, accounting for 15% of Ontario's total food and beverage manufacturing imports.

¹⁰³ Canadian Business Patterns Database. Statistics Canada. December 2010.

Economic Impacts

The meat product manufacturing subsector generated approximately \$16 billion in direct, indirect and induced economic output, including close to \$6 billion in nominal GDP. Approximately 91,783 direct, indirect and induced jobs are generated by the meat product manufacturing subsector, including about 30,058 in direct and 61,725 in indirect and induced FTE's. This employment supports about \$3 billion in direct, indirect and induced wages and salaries, including about \$1.2 billion in direct and close to \$1.8 billion in indirect and induced wages and salaries. Aggregate direct, indirect and induced taxes generated by the meat product manufacturing subsector are estimated at \$1 billion.



SEAFOOD

This subsector comprises establishments primarily engaged in manufacturing seafood products including:

- Canning seafood including soup.
- Smoking, salting and drying seafood.
- Preparing fresh fish by removing heads, fins, scales, bones and entrails.
- Shucking and packing fresh shellfish.
- Processing marine fats and oils.
- Freezing seafood.

Establishments known as "floating factory ships" that are engaged in shipboard processing of seafood are included in this subsector.

The table below summarizes key subsector statistics. More detailed explanations of each statistic follow.

Table 15. Seafood Manufacturing Subsector Profile

| SEAFOOD | | |
|--|----------------|---|
| | Value \$('000) | Percentage of Food and Beverage Manufacturing |
| Number of establishments | 43 | 1% |
| Total revenue | \$265,653 | 1% |
| Value of shipments | \$255,114 | 1% |
| Manufacturing value-added | \$113,825 | 1% |
| Total expenses | \$239,169 | 1% |
| Total number of employees ¹⁰⁴ | 1,474 | 1% |
| Total wages and salaries ¹⁰⁵ | \$45,920 | 1% |
| Exports | \$119,770 | 2% |
| Imports | \$634,029 | 5% |

Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010.
Industry Canada, International Trade Data, 2010.
Statistics Canada, Input-Output Model.

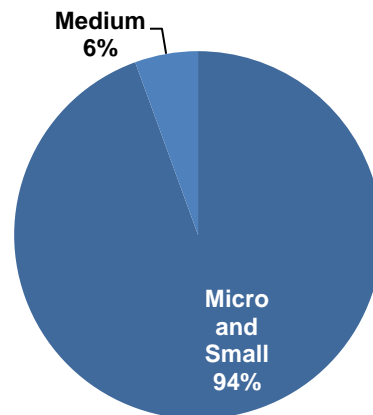
¹⁰⁴ For more information on the employment, wages and salaries data and related assumptions please see Appendix D.

¹⁰⁵ Ibid.

Number of Establishments

According to the Canadian Business Patterns Database, an estimated 5% of Canadian seafood manufacturing establishments are located in Ontario. In 2010, the breakdown of employer establishments in the seafood manufacturing subsector in Ontario was as follows: 94% of them were considered micro and small establishments employing between 1 to 99 people, 6% were medium sized establishments employing from 100 to 499 people and 0% were large sized establishments employing more than 500 people.¹⁰⁶

Figure 32. Seafood Product Manufacturing Establishments by Size



Revenues and Manufacturing Value-Added

In 2010, subsector sales amounted to nearly \$266 million, making up 1% of Ontario's food and beverage manufacturing sales. Subsector sales increased 59% from \$167 million in 2005 to \$266 million in 2010. The total food and beverage manufacturing sector's value added from own manufacturing in 2010 was about \$13 billion, with seafood manufacturing accounting for about \$114 million or 1% of the total. Manufacturing revenues per production worker for this subsector increased from \$408 thousand in 2005 to \$412 thousand in 2010. In 2010, Ontario's seafood manufacturing establishments produced \$255 million in shipments, representing close to 1% of the total of Ontario's food and beverage manufacturing value of shipments.

Expenses

In 2010, the total expenses by the seafood manufacturing subsector amounted to \$239 million, of which 72% were considered manufacturing costs. In 2010, the subsector spent about \$22 million on production wages; \$4 million on energy, water and vehicle fuel; and \$145 million on materials and supplies for manufacturing activities.

International Trade

In 2010, Ontario's seafood manufacturing subsector exports were \$120 million, accounting for 2% of Ontario's total annual food and beverage manufacturing exports. In the same year, subsector imports were \$634 million, accounting for 5% of Ontario's total food and beverage manufacturing imports.

¹⁰⁶ Canadian Business Patterns Database. Statistics Canada. December 2010.

Economic Impacts

The seafood product manufacturing subsector generated approximately \$446 million in direct, indirect and induced economic output, including \$185 million in nominal GDP. Approximately 2,688 direct, indirect and induced jobs are generated by the seafood product manufacturing subsector, including about 1,474 in direct and 1,214 in indirect and induced FTE's. This employment supports about \$91 million in direct, indirect and induced wages and salaries, including close to \$46 million in direct and close to \$45 million in indirect and induced wages and salaries. Aggregate direct, indirect and induced taxes generated by the seafood product manufacturing subsector are estimated at \$35 million.



BAKERIES AND TORTILLA

This subsector comprises establishments primarily engaged in manufacturing baked goods. The subsector also includes establishments primarily engaged in manufacturing bakery products for retail sale, but not for immediate consumption.

Sample products include: tortillas, bagels, cakes doughnuts, pastries, biscuits, buns, croissants, croutons, rolls, pizza dough, pizza crusts cakes, pies, fruit pies, frozen dessert pies, muffins, pastries, ice cream cones, wafers, cookies, flour mixes and dry pasta.

The table below summarizes key subsector statistics. More detailed explanations of each statistic follow.

Table 16. Bakeries and Tortilla Manufacturing Subsector Profile

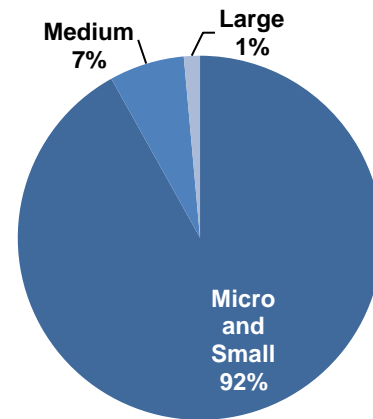
| BAKERIES AND TORTILLA | | |
|--|----------------|---|
| | Value \$('000) | Percentage of Food and Beverage Manufacturing |
| Number of establishments | 844 | 29% |
| Total revenue | \$4,719,412 | 12% |
| Value of shipments | \$4,284,172 | 12% |
| Manufacturing value-added | \$2,148,275 | 17% |
| Total expenses | \$4,198,846 | 12% |
| Total number of employees ¹⁰⁷ | 23,658 | 19% |
| Total wages and salaries ¹⁰⁸ | \$961,033 | 18% |
| Exports | \$1,416,458 | 21% |
| Imports | \$763,774 | 7% |

Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010.
 Industry Canada, International Trade Data, 2010.
 Statistics Canada, Input-Output Model.

¹⁰⁷ For more information on the employment, wages and salaries data and related assumptions please see Appendix D.

¹⁰⁸ Ibid.

Figure 33. Bakeries and Tortilla Manufacturing Establishments by Size



Number of Establishments

An estimated 39.8% of Canadian bakeries and tortilla manufacturing establishments are located in Ontario. In 2010, the breakdown of employer establishments in the subsector in Ontario was as follows: 92% of them were considered micro and establishments employing between 1 to 99 people, 7% were medium sized establishments employing from 100 to 499 people and 1% were large sized establishments employing more than 500 people.¹⁰⁹

Revenues and Manufacturing Value-Added

In 2010, the subsector sales amounted to close to \$5 billion, making up 12% of Ontario's food and beverage manufacturing sales. Subsector sales increased 28% from \$3.6 billion in 2005 to \$4.7 billion in 2010. The total food and beverage manufacturing sector's value added from own manufacturing in 2010 was about \$13 billion, with bakeries and tortilla manufacturing accounting for \$2 billion or 17% of the total. Manufacturing revenues per production worker for this subsector increased from \$247 thousand in 2005 to \$300 thousand in 2010. In 2010, Ontario's bakeries and tortilla manufacturing establishments produced over \$4 billion in shipments, representing 12% of the total of Ontario's food and beverage manufacturing value of shipments.

Expenses

In 2010, the total expenses by the bakeries and tortilla manufacturing subsector amounted over to \$4 billion, of which 64% were considered manufacturing costs. In 2010, the subsector spent about \$542 million on production wages; \$103 million on energy, water and vehicle fuel; and over \$2 billion on materials and supplies for manufacturing activities.

International Trade

In 2010, Ontario's bakeries and tortilla manufacturing subsector exports were over \$1 billion, accounting for 21% of Ontario's total annual food and beverage manufacturing exports. In the same year, subsector imports were \$764 million, accounting for 7% of Ontario's total food and beverage manufacturing imports.

¹⁰⁹ Canadian Business Patterns Database. Statistics Canada. December 2010.

Economic Impacts

The bakeries and tortilla manufacturing subsector generated approximately over \$7 billion in direct, indirect and induced economic output, including close to \$4 billion in nominal GDP. Approximately 45,319 direct, indirect and induced jobs are generated by the bakeries and tortilla manufacturing subsector, including about 23,658 in direct and 21,661 in indirect and induced FTE's. This employment supports close to \$1.8 billion in direct, indirect and induced wages and salaries, including about \$961 million in direct and close to \$803 million in indirect and induced wages and salaries. Aggregate direct, indirect and induced taxes generated by the bakeries and tortilla manufacturing subsector are estimated at \$696 million.



OTHER FOOD MANUFACTURING

This subsector includes agri-food establishments not belonging to any other subsector. Examples of other food manufacturing include:

- Snack Food Manufacturing.
- Other Snack Food Manufacturing.
- Roasted Nut and Peanut Butter Manufacturing.
- Coffee and Tea Manufacturing.
- Flavouring Syrup and Concentrate Manufacturing.
- Seasoning and Dressing Manufacturing.

The table below summarizes key subsector statistics. More detailed explanations of each statistic follow.

Table 17. Other Food Manufacturing Subsector Profile

| OTHER FOOD MANUFACTURING | | |
|--|----------------|---|
| | Value \$('000) | Percentage of Food and Beverage Manufacturing |
| Number of establishments | 343 | 12% |
| Total revenue | \$3,314,654 | 9% |
| Value of shipments | \$3,058,231 | 9% |
| Manufacturing value-added | \$1,193,578 | 9% |
| Total expenses | \$2,910,319 | 9% |
| Total number of employees ¹¹⁰ | 16,616 | 13% |
| Total wages and salaries ¹¹¹ | \$674,977 | 13% |
| Exports | \$884,391 | 13% |
| Imports | \$2,029,920 | 17% |

Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010.
 Industry Canada, International Trade Data, 2010.
 Statistics Canada, Input-Output Model.

¹¹⁰ For more information on the employment, wages and salaries data and related assumptions please see Appendix D.

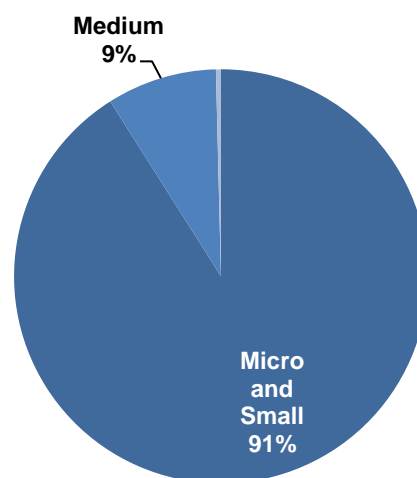
¹¹¹ Ibid.



Number of Establishments

According to the Canadian Business Patterns Database, an estimated 38% of Canadian other food manufacturing establishments are located in Ontario, followed by Quebec and British Columbia. In 2010, the breakdown of employer establishments in the subsector in Ontario was as follows: 91% of them were considered micro and small establishments employing between 1 to 99 people, 9% were medium sized establishments employing from 100 to 499 people and 0% were large sized establishments employing more than 500 people.¹¹²

Figure 34. Other Food Manufacturing Establishments by Size



Revenues and Manufacturing Value-Added

In 2010, subsector sales amounted to over \$3 billion, making up 9% of Ontario's food and beverage manufacturing sales. Subsector sales increased 16% from \$2.8 billion in 2005 to \$3.3 billion in 2010. The total food and beverage manufacturing sector's value added from own manufacturing in 2010 was about \$13 billion, with other food manufacturing accounting for over \$1 billion or 12% of the total. Manufacturing revenues per production worker for this subsector increased from \$437 thousand in 2005 to \$459 thousand in 2010. In 2010, Ontario's other food manufacturing establishments produced \$3 billion in shipments, representing 9% of the total of Ontario's food and beverage manufacturing value of shipments.

Expenses

In 2010, the total expenses by the other food manufacturing subsector amounted close to \$3 billion, of which 72% were considered manufacturing costs. In 2010, the subsector spent about \$233 million on production wages; \$65 million on energy, water and vehicle fuel; and close to \$2 billion on materials and supplies for manufacturing activities.

International Trade

In 2010, Ontario's other food manufacturing subsector exports were \$884 million, accounting for 13% of Ontario's total annual food and beverage manufacturing exports. In the same year, subsector imports were \$2 billion, accounting for 17% of Ontario's total food and beverage manufacturing imports.

¹¹² Canadian Business Patterns Database. Statistics Canada. December 2010.

Economic Impacts

The other food manufacturing subsector generated approximately \$5 billion in direct, indirect and induced economic output, including over \$2 billion in nominal GDP. Approximately 31,830 direct, indirect and induced jobs are generated by the other food manufacturing subsector, including about 16,616 in direct and 15,213 in indirect and induced FTE's. This employment supports close to \$1.2 billion in direct, indirect and induced wages and salaries, including close to \$675 million in direct and close to \$564 million in indirect and induced wages and salaries. Aggregate direct, indirect and induced taxes generated by the other food manufacturing subsector are estimated at \$489 million.



BEVERAGE MANUFACTURING

This subsector comprises establishments primarily engaged in manufacturing beverage products. Sample activities include:

- Distilling blending and mixing liquor and other ingredients.
- Brewing beer, ale, malt liquors and non-alcoholic beer.
- Manufacturing soft drinks, ice or bottled water, including that which is naturally carbonated.
- Manufacturing wine or brandy, from grapes or other fruit.

The table below summarizes key subsector statistics. More detailed explanations of each statistic follow.

Table 18. Summary of Beverage Manufacturing Subsector Profile

| BEVERAGE MANUFACTURING | | |
|--|----------------|---|
| | Value \$('000) | Percentage of Food and Beverage Manufacturing |
| Number of establishments | 419 | 14% |
| Total revenue | \$4,436,085 | 11% |
| Value of shipments | \$4,153,682 | 12% |
| Manufacturing value-added | \$2,572,353 | 20% |
| Total expenses | \$3,037,116 | 9% |
| Total number of employees ¹¹³ | 11,438 | 9% |
| Total wages and salaries ¹¹⁴ | \$579,982 | 11% |
| Exports | \$497,813 | 7% |
| Imports | \$1,554,997 | 13% |

Source: MNP Analysis
Statistics Canada, Input-Output Model.

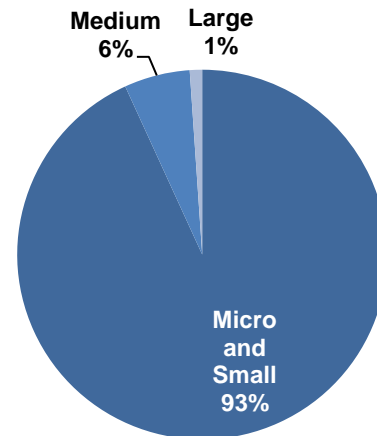
¹¹³ For more information on the employment, wages and salaries data and related assumptions please see Appendix D.

¹¹⁴ Ibid.

Number of Establishments

According to the Canadian Business Patterns Database, an estimated 43% of Canadian beverage product manufacturing establishments are located in Ontario, followed by British Columbia and Quebec. In 2010, the breakdown of employer establishments in the beverage product manufacturing subsector in Ontario was as follows: 93% of them were considered micro and small establishments employing between 1 to 99 people, 6% were medium sized establishments employing from 100 to 499 people and 1% were large sized establishments employing more than 500 people.¹¹⁵

Figure 36. Beverage Manufacturing Establishments by Size



Revenues and Manufacturing Value-Added

In 2010, subsector sales amounted to nearly \$4 billion, making up 11% of Ontario's food and beverage manufacturing sales. Subsector sales decreased by 12% from \$5.0 billion in 2005 to \$4.4 billion in 2010. The total food and beverage manufacturing sector's value added from own manufacturing in 2010 was about \$13 billion, with beverage product manufacturing accounting for \$3 billion or 20% of the total. In 2010, Ontario's beverage manufacturing establishments produced over \$4 billion in shipments, representing 12% of the total of Ontario's food and beverage manufacturing value of shipments.

Expenses

In 2010, the total expenses by the beverage manufacturing subsector amounted to \$3 billion.

International Trade

In 2010, Ontario's beverage manufacturing subsector exports were \$498 million, accounting for 7% of Ontario's total annual food and beverage manufacturing exports. In the same year, subsector imports were close to \$2 billion, accounting for 13% of Ontario's total food and beverage manufacturing imports.

¹¹⁵ Canadian Business Patterns Database. Statistics Canada. December 2010.

Economic Impacts

The beverage manufacturing subsector generated over \$6 billion in direct, indirect and induced economic output, including over \$3 billion in nominal GDP. Approximately 27,624 direct, indirect and induced jobs are generated by the beverage manufacturing subsector, including about 11,438 in direct and 16,186 in indirect and induced FTE's. This employment supports close to \$1.2 billion in direct, indirect and induced wages and salaries, including close to \$580 million in direct and about \$646 million in indirect and induced wages and salaries. Aggregate direct, indirect and induced taxes generated by the beverage manufacturing subsector are estimated at \$640 million.



APPENDIX B – ADDITIONAL BENCHMARKING COMPARISONS

This appendix contains additional benchmarking statistics comparing the Ontario food and beverage processing sector to the electrical equipment, appliance and component manufacturing sector and the motor vehicle manufacturing subsector. The most important statistics are outlined in Chapter 7 of the report.

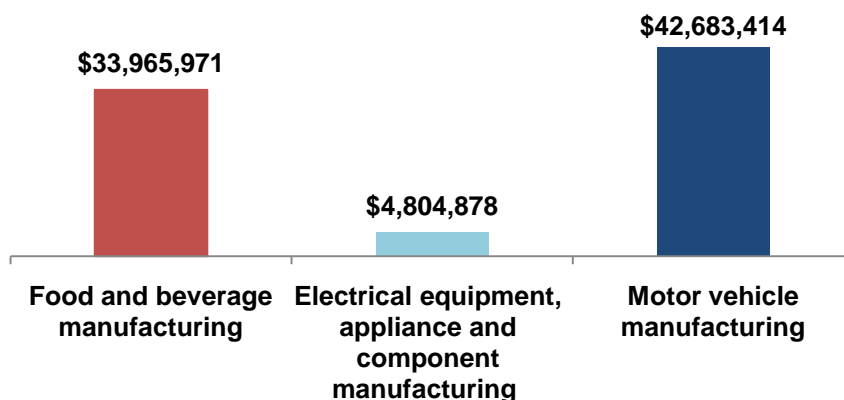


Total Expenses

As shown in the figure below, in 2010 the food and beverage manufacturing sector's total expenses surpassed the electrical equipment, appliance and component manufacturing sector and were slightly less than in the motor vehicle manufacturing subsector.

The benchmarking analysis showed that in 2010, the total expenses by the food and beverage manufacturing sector amounted close to \$34 billion. In comparison, the total expenses by the electrical equipment, appliance and component manufacturing sector and the motor vehicle manufacturing subsector amounted to \$5 and \$43 billion respectively.

Figure 37. Total Expenses by Major Manufacturing Sector (Value \$'000; 2010)

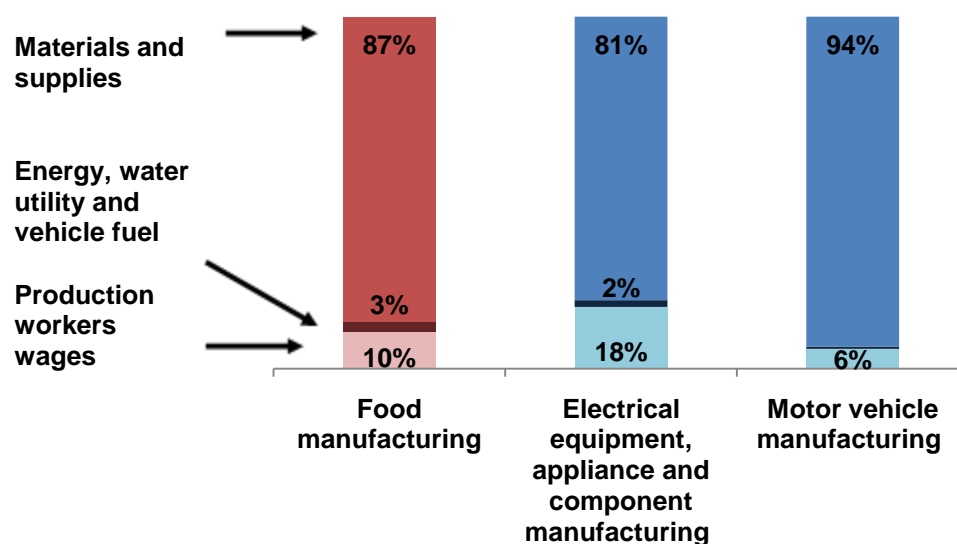


Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010



As shown in the figure below, in 2010, out of the total manufacturing costs for the food manufacturing sector (excluding food beverage manufacturing which was not available),¹¹⁶ materials and supplies were by far the largest expense accounting for 87% of the total manufacturing costs. Likewise, the manufacturing costs for the electrical equipment, appliance and component manufacturing sector and the motor vehicle manufacturing subsector were also dominated by the costs of materials and supplies (accounting for 81% and 94% of manufacturing costs respectively). **Food manufacturing along with the comparator sectors and subsectors is therefore vulnerable to the fluctuations in the prices of materials and supplies.**

Figure 38. Food Manufacturing Costs Breakdown by Major Manufacturing Sector (2010)¹¹⁷



Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010

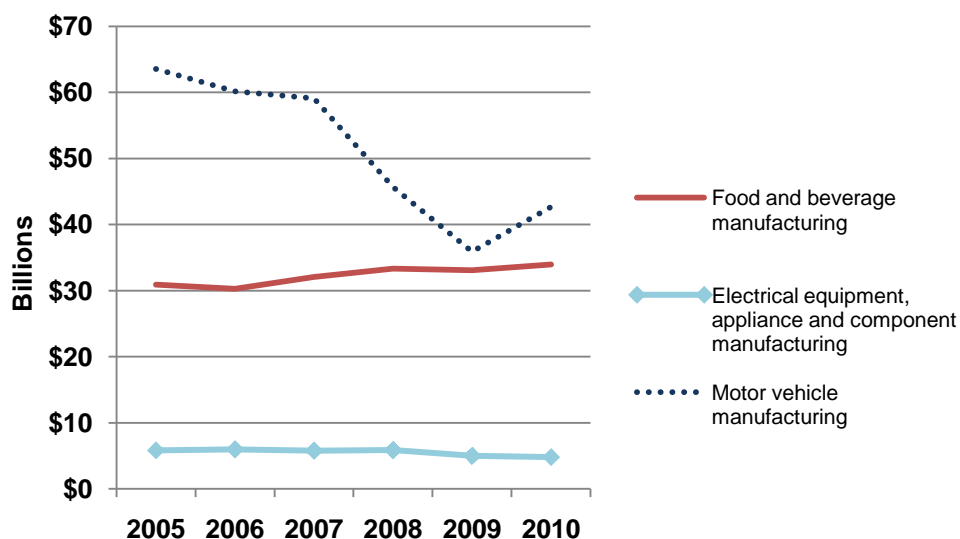
¹¹⁶ Generally, the three most important categories of manufacturing costs include costs of materials and supplies; cost of energy, water and vehicle fuel; and production worker wages.

¹¹⁷ Percentages may not add up due to rounding.



Between 2005 and 2010, the electrical equipment, appliance and component manufacturing sector and the motor vehicle manufacturing subsector experienced decreases of 18% and 33% respectively. In contrast, the food and beverage manufacturing sector experienced an increase of 10%.

Figure 39. Expenses by Major Manufacturing Sector (2005-2010)



Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2005-2010



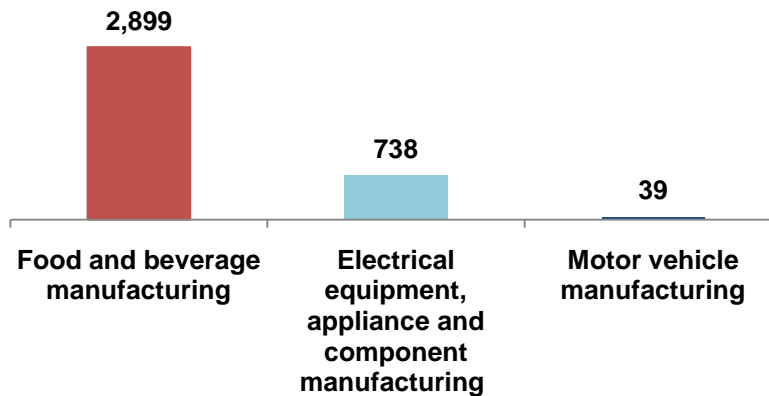
Number of Establishments

As shown in the figure below, in 2010 the food and beverage manufacturing sector was larger than the comparator sectors in terms of number of establishments.

The benchmarking analysis showed that:

- The majority of food and beverage manufacturing in Canada takes place in Ontario. **Ontario is home to 2,899 food and beverage manufacturing establishments, including multinationals, home-grown giants and niche-driven businesses. In comparison, electrical equipment, appliance and component manufacturing and motor vehicle manufacturing only had 738 and 39 establishments respectively.**
- According to Canada's Business Patterns Database, Ontario is home to 32% of the Canadian food and 43% of the beverage manufacturing establishments, 46% of the equipment, appliance and component manufacturing establishments and 46% of the motor vehicle manufacturing establishments in Canada.
- In 2010, the food and beverage manufacturing sector's share of total manufacturing establishments in Ontario was 9%. In comparison, the electrical equipment, appliance and component manufacturing sector's share was 2% and the motor vehicle manufacturing subsector's share was 0.1%.

Figure 40. Number of Establishments by Major Manufacturing Sector (2010)

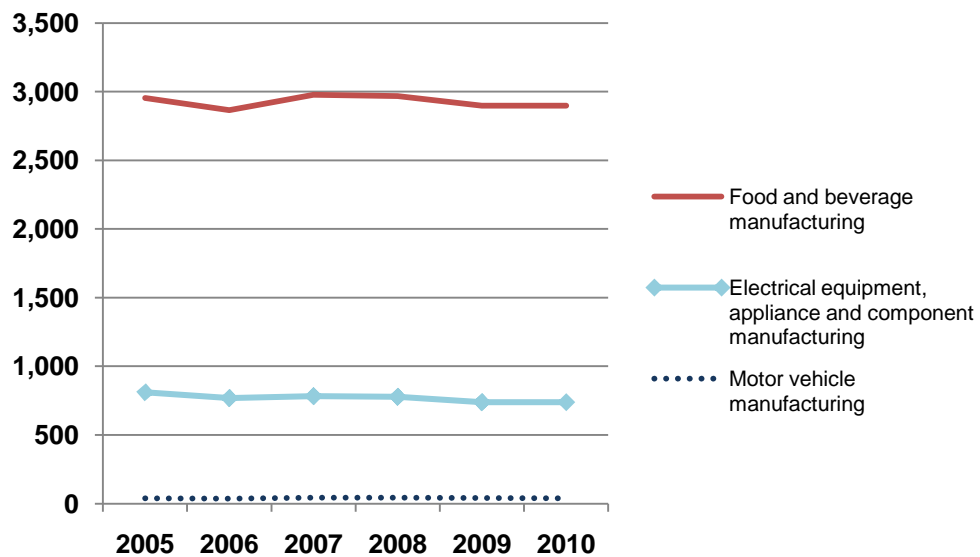


Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2010



Between 2005 and 2010, the number of establishments in the food and beverage sector decreased by 2%. The number of establishments in the electrical equipment, appliance and component sector decreased by 9%, while the number of establishments in the motor vehicle manufacturing subsector stayed relatively the same.

Figure 41. Number of Establishments by Major Manufacturing Sector (2005-2010)



Source: Statistics Canada, Annual Survey of Manufacturers and Logging, 2005-2010



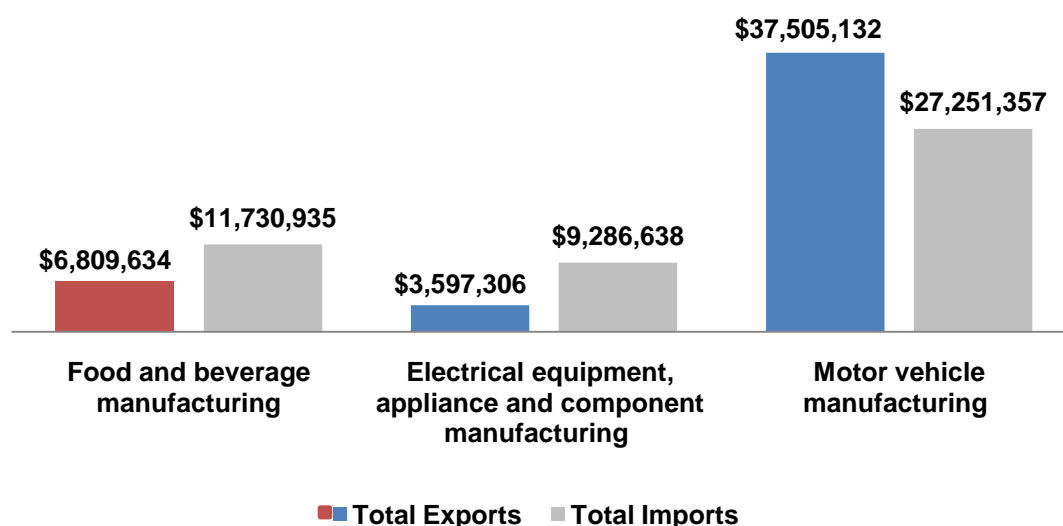
International Trade

The food and beverage manufacturing sector surpassed the electronic equipment, appliance and component manufacturing sector in terms of imports and exports. The motor vehicle manufacturing subsector, on the other hand, was larger than food and beverage processing both in terms of imports and exports.

The benchmarking analysis showed that in 2010, Ontario's food and beverage manufacturing sector exports were about \$7 billion, accounting for 33% of Canada's total food and beverage manufacturing exports.

In 2010, Ontario's food and beverage manufacturing sector imports were about \$12 billion, accounting for 56% of Canada's total food and beverage manufacturing imports.

Figure 42. Total Exports and Imports by Major Manufacturing Sector (Value \$'000; 2010)

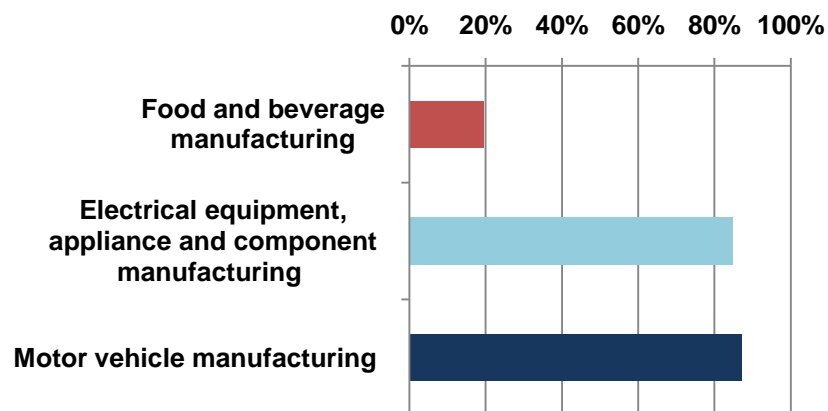


Source: Industry Canada, International Trade Data, 2010



As shown in the figure below, approximately, 20% of the food and beverage manufacturing sector's shipments were exported in 2010. In contrast, 85% and 87% of the electrical equipment, appliance and component manufacturing sector's and the motor vehicle manufacturing subsector's shipments were exported in 2010.

Figure 43. Export Intensity by Major Manufacturing Sector (2010)



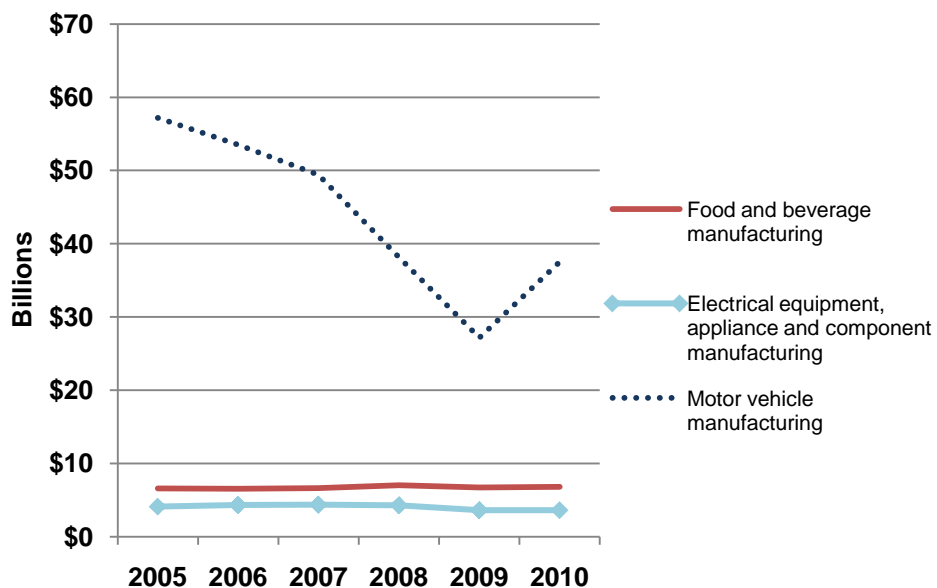
Export intensity is calculated as a share of value of shipments.¹¹⁸
 Source: Industry Canada, International Trade Data, 2010

¹¹⁸ Export intensity is defined as Domestic Exports / Manufacturing Shipments. The more an industry is export oriented, the higher this ratio.



Between 2005 and 2010, the food and beverage manufacturing sector experienced a 4% increase in exports while the comparator sector and subsector experienced decreases. The electrical equipment, appliance and component manufacturing sector and the motor vehicle manufacturing subsector, on the other hand, experienced significant decreases at 12% and 34% respectively.

Figure 44. Total Exports by Major Manufacturing Sector (2005-2010)

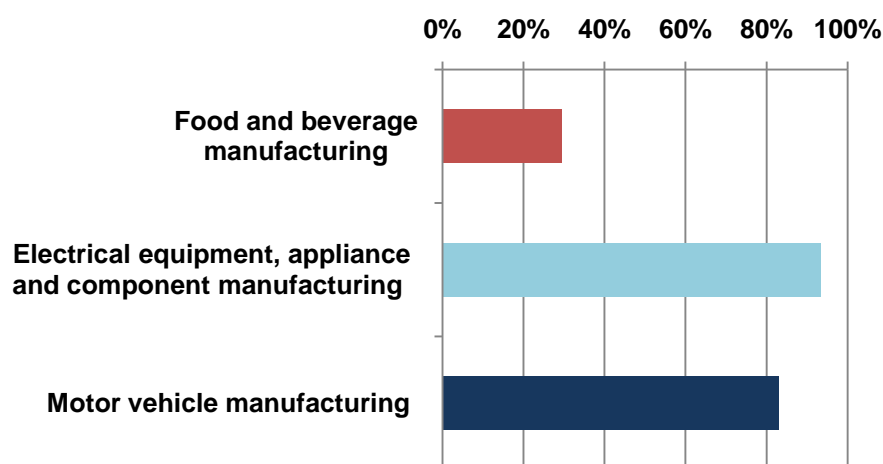


Source: Industry Canada, International Trade Data 2005 - 2010



As shown in the figure below, food and beverage imports accounted for 30% of the domestic market in 2010. In contrast, the electrical equipment, appliance and component manufacturing sector's and the motor vehicle manufacturing subsector's imports accounted for 93% and 83% of the domestic market in 2010 respectively. **The comparator sectors are therefore competing for sales with significantly more importers than is the case for the food and beverage processing sector.**

Figure 45. Import Intensity by Major Manufacturing Sector (2010)

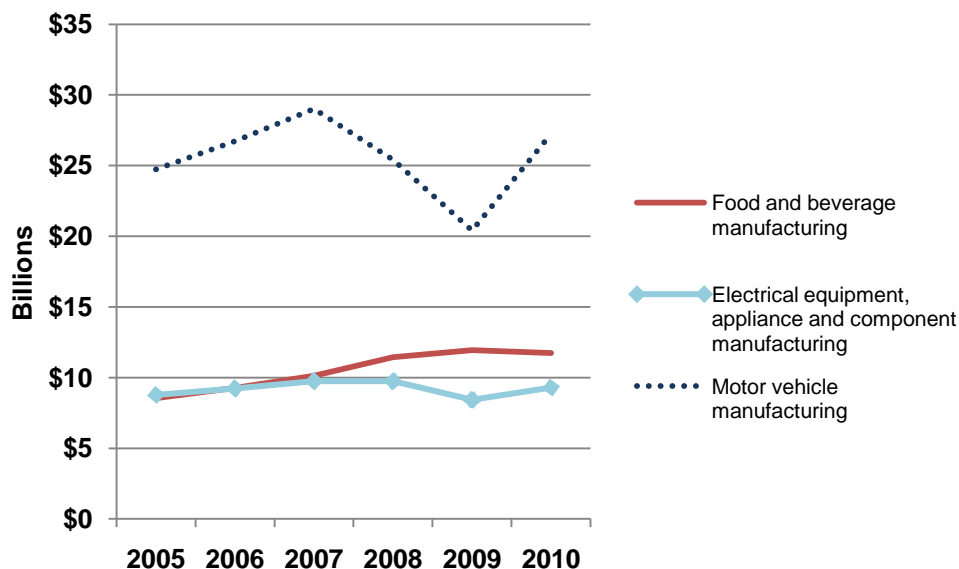


Import intensity is calculated as imports / (value of shipments – exports + imports).¹¹⁹
 Source: Industry Canada, International Trade Data, 2010

¹¹⁹ Import intensity is defined as the ratio of imports to manufacturing revenues minus exports plus imports X 100. The more an industry is import oriented, the higher this ratio.

Between 2005 and 2010, the food and beverage manufacturing sector experienced a 37% increase in imports. In comparison, the electrical equipment, appliance and component manufacturing sector and the motor vehicle manufacturing subsector experienced smaller increases at 6% and 10% respectively.

Figure 46. Total Imports by Major Manufacturing Sector (2005-2010)



Source: Industry Canada, International Trade Data, 2005-2010

Please note that the above trade statistics should be interpreted with caution, because:

- Statistics Canada and Industry Canada export data is sometimes attributed to the US when they really travel through the US to other destinations.
- Statistics Canada attributes some imports to Ontario when they are really going through Ontario to other provinces.



APPENDIX C – DATA SOURCES

This appendix lists the key data sources that MNP consulted throughout our analyses. Supplementary references are included in the footnotes throughout the report.

SECONDARY RESEARCH

Ontario Websites

- Alliance of Ontario Food Processors, www.aofp.ca
- Guelph Food Technology Centre, www.gftc.ca
- Invest in Ontario, www.sse.gov.on.ca
- Ontario Dairy Council, www.ontariodairies.ca
- Ontario East, www.onteast.on.ca
- Ontario Food Industry - Ontario Food Cluster, www.ontariofoodcluster.com
- Ontario Independent Meat Processors, www.oimp.ca
- Ontario Investment Service, www.2Ontario.com
- Ontario Meat and Poultry – Support Ontario, Buy Local, <http://ontariomeatproducts.ca>
- Ontario Ministry of Economic Development and Trade, www.ontariocanada.com
- Ontario Ministry of Finance, www.fin.gov.on.ca/en
- Ontario's Ministry of Agriculture, Food and Rural Affairs, www.omafra.gov.on.ca
- Wine Council of Ontario, www.winesofontario.org

Canadian Websites

- Agriculture and Agri-Food Canada, www.agr.gc.ca
- Baking Association of Canada, www.baking.ca
- Food and Farming Canada, www.foodandfarmingcanada.com
- Industry Canada, www.ic.gc.ca
- Statistics Canada, www.statcan.gc.ca



PRIMARY RESEARCH

MNP conducted 15 telephone interviews with representatives from Ontario municipalities and other relevant organizations, including mayors and economic development officials. The table below summarizes the interviewee profile.

Table 19. Interviewee Profile

| Municipality / Organization | Interviewee | Title |
|---|------------------------------|--|
| 1. Burlington Economic Development Corporation | Kyle Benham | Executive Director |
| 2. City of Belleville | Karen Poste | Manager, Economic and Strategic Initiatives |
| 3. City of Brantford | John Frabotta | Director, Economic Development and Tourism |
| 4. City of Cambridge | Leah Bozic | Senior Economic Development Officer |
| 5. City of Hamilton | Neil Everson | Director, Economic Development and Real Estate |
| 6. City of Mississauga | Larry Petovello | Director, Economic Development |
| 7. City of Niagara Falls | Wendy Canavan | Economic Development Officer |
| 8. City of Toronto | Michael Wolfson | Senior Advisor, Food and Beverage Sector |
| 9. City of Vaughan | Tim Simmonds and Shirley Kam | Director and Senior Manager, Economic Development |
| 10. London Economic Development Corporation | Peter White | President and CEO |
| 11. Ministry of Agriculture, Food and Rural Affairs | George Borovilos | Director, Business Development Branch |
| 12. Municipality of Leamington | John Paterson | Mayor |
| 13. Municipality of Strathroy-Caradoc | Paul Hicks | Planner |
| 14. Ivey Business School | Dave Sparling | Professor, Operations Management / Agri-Food Innovation and Regulation Chair |
| 15. Windsor Essex Economic Development Corporation | Wendy Stark | Economic Development Officer |



APPENDIX D – ECONOMIC IMPACT ANALYSIS APPROACH

The main goal of an economic impact study is to quantify the economic contributions that an industry or project makes to a region. To augment the economic impacts, the study may also include a description of the broader economic and social benefits produced by the industry or organization. The types of economic impacts and economic and social benefits that may be contained in an economic impact study are summarized in the table below.

| | |
|-------------------|---|
| Economic Impacts | <ul style="list-style-type: none"> •Gross Domestic Product (GDP) • Employment • Government Tax Revenues |
| Economic Benefits | <ul style="list-style-type: none"> •Value Chain Impacts •Spin-Off Opportunities •Training Opportunities |
| Social Benefits | <ul style="list-style-type: none"> •Contributions to Community Groups •Community Involvement •Support for Local Development Industries |



ECONOMIC IMPACTS

In general, economic impacts are viewed as being restricted to quantitative, well-established measures of economic activity. The most commonly used of these measures are output, GDP, government tax revenue and employment:

- **Output** – the total gross value of all business revenue. This is the broadest measure of economic activity.
- **GDP** – the “value added” to the economy (the unduplicated total value of goods and services).
- **Government Tax Revenue** – the total amount of tax revenues generated for different levels of government.
- **Employment** – the number of additional jobs created.

MNP estimated quantitative economic impacts of Ontario’s food and beverage processing using an input-output model with Statistics Canada multipliers. Input-output models are based on statistical information about the flow of goods and services among various industries. We applied the model and the relevant multipliers to the revenue generated by each of AOFP’s 10 subsectors to estimate direct, indirect and induced impacts:

- **Direct impacts** are due to changes to front end businesses that receive operating revenue as a direct consequence of an industry. Direct impacts are related to original purchases or “direct sales” from primary suppliers.
- **Indirect impacts** are due to changes in the activity of suppliers. Indirect impacts include the spending that food and beverage processors’ suppliers make when purchasing goods and services from their own suppliers (i.e. secondary suppliers) in order to meet the demand generated by the food and beverage processing sector.
- **Induced impacts** are due to shifts in spending on goods and services as a consequence of the payroll of the directly and indirectly affected businesses. In the case of food and beverage processing, induced impacts reflect the additional spending by the employees of the processors’ suppliers (primary suppliers) and their suppliers’ suppliers (secondary suppliers).

For examples of direct, indirect and induced impacts, please see the glossary in Section 1 of this report.



ECONOMIC AND SOCIAL BENEFITS

To augment the economic impacts, MNP also investigated the more qualitative economic and social benefits that arise from the food and beverage processing sector's activities in Ontario. MNP gathered relevant input and data in 15 interviews with municipality representatives and other key informants.

A list of interviewees is included in Appendix C.



ASSUMPTIONS

Estimating Beverage Manufacturing Data

Statistics Canada does not publish key industry statistics for Ontario beverage manufacturing alone. The agency only publishes aggregated beverage manufacturing (NAICS code 3121) and tobacco manufacturing (NAICS code 3122) data. Statistics Canada protects the confidentiality of tobacco manufactures in Ontario because there are so few of them. In this way, Statistics Canada meets the confidentiality standards set out by the Statistics Act.

Separate beverage and tobacco statistics are available for Canada as a whole.

For our sector study for the AOFB, MNP needed to separate beverage and tobacco statistics to report on the size and impacts of the Ontario beverage processing subsector and hence the food and beverage processing sector as a whole.

MNP extrapolated the beverage manufacturing data from the aggregated beverage and tobacco manufacturing data using a three step process. The process and related assumptions are described below using revenue data as an example:

1. **MNP estimated tobacco manufacturing revenues in Ontario.** According to Statistics Canada, in 2009, there were 22 tobacco manufacturing establishments in Canada, 14 in Ontario (63.63%) and 8 in Quebec (36.36%). MNP assumed that the proportion for total tobacco manufacturing revenue in Ontario versus Canada is the same as the proportion of total establishments in Ontario versus Canada (63.63%). Hence, MNP estimated Ontario's tobacco manufacturing revenue to be 63.63% of total revenues for tobacco manufacturing in Canada.
2. **MNP estimated beverage manufacturing revenues in Ontario.** From 2005 to 2009, Statistics Canada reported data for three out of the four subsectors under beverage manufacturing. By doing this, Statistics Canada suppressed revenue data for one subsector to prevent full disclosure of beverage manufacturing revenue data. From 2005 to 2008, winery revenues (NAICS code 31213) were suppressed. In 2009, winery revenues were reported but distilleries (NAICS code 31214) were suppressed.¹²⁰ In 2010, both winery and distillery revenues were suppressed.
 - a. **Estimate 2010 winery revenues.** MNP assumed that revenues for Ontario's wineries had the same percentage change from 2009 to 2010 as the average change for the three reported subsectors - soft drink and ice manufacturing (NAICS code 31211), breweries (NAICS code 31212) and distilleries (NAICS code 31214).
 - b. **Estimate 2010 distillery revenues.** Statistics Canada listed the same number of distillery establishments in 2008 and 2009. MNP assumed that revenues for Ontario's distilleries in 2009 were the same as in 2008. To calculate the 2010 distillery revenues,

¹²⁰ MNP accessed the data in February 2012. In April 2012, winery revenues had been suppressed also.



MNP used the same procedure as for wineries and multiplied 2009 revenues with the average change for the three reported subsectors.

- c. **Calculate Ontario beverage manufacturing revenues.** MNP then added the estimated revenues (wineries and distilleries) to the actual revenues for the remaining subsectors.
3. **Last, MNP verified beverage manufacturing revenues in Ontario.** MNP compared the actual aggregated beverage and tobacco revenues with the estimated revenues (summary of the outputs of Step 1 and Step 2 above) to ensure they are reasonably close. The values were comparable. From 2004 to 2010 there was only 4% to 8% variability between the two values.

Estimating Employment and Wages and Salaries Data

Employment estimates can vary depending on the data sources and assumptions used. MNP estimated direct, indirect and induced employment, as well as wages and salaries using an input-output model and the procedure described earlier in this chapter.

All other statistics such as total revenues, value of shipments, total expenses, manufacturing value added, exports, and imports are based on Statistics Canada, Annual Survey of Manufacturers and Logging, 2010 and Industry Canada, International Trade Data, 2010 unless otherwise noted.

Although Statistics Canada, through the Annual Survey of Manufacturers and Logging, reports employment, wages and salaries statistics for Ontario's food and beverage processing sector, the employment, wages and salaries figures derived through Statistics Canada's input-output model are believed to be more representative of the food and beverage processing sector.

Estimating Employment Data for the Comparator Sectors and Subsectors

For the benchmarking analysis section in this report, MNP needed to compare the food and beverage processing sector's direct employment to the electrical equipment, appliance and component manufacturing, the motor vehicle manufacturing and the agriculture sector's employment.

In order to obtain direct employment estimates for the comparator sectors and subsectors using an input-output model, MNP used the following approach:

- MNP used an input-output model with Statistics Canada multipliers to estimate the direct employment impacts of Ontario's electronic and component manufacturing sector. To estimate economic impacts, MNP assumed total sector revenues of \$5,172,620.¹²¹
- MNP used an input-output model with Statistics Canada multipliers to estimate direct employment impacts of Ontario's agriculture sector. To estimate impacts, MNP assumed total sector farm cash receipts of \$10,280,715.¹²²

¹²¹ Survey of Manufacturers and Logging. Statistics Canada. 2010.

¹²² Farm Cash Receipts, Statistics Canada, 2010.



- Statistics Canada's interprovincial input-output model does not report motor vehicle manufacturing multipliers at the level of aggregation used in this study. Therefore, MNP was not able to estimate direct employment impacts using an input-output model for the motor vehicle manufacturing sector. According to the Automotive Communities Partnership study, in 2009, the motor vehicle manufacturing sector in Ontario generated 31,500 direct employees.¹²³ MNP used the Automotive Communities Partnership direct employment estimates to benchmark Ontario's food and beverage processing sector.

Estimating Municipal Tax Impacts

Statistics Canada's interprovincial input-output model does not report municipal tax multipliers. For the sector study for the AOFPP, MNP needed to estimate municipal tax multipliers in order to report municipal tax revenue generated by each of the food and beverage manufacturing subsectors.

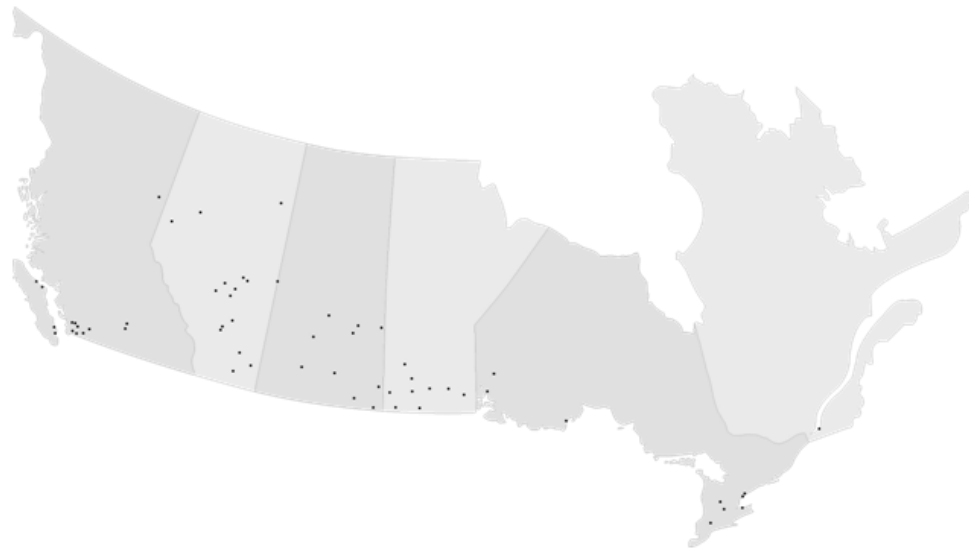
MNP used the "Indirect Taxes on Production" multiplier from the input-output model to approximate municipal tax impacts. The "Indirect Taxes on Production" multiplier includes a number of federal and provincial fees and taxes as well as municipal taxes. Examples of federal taxes include capital taxes levied against corporate entities, Canada Deposit Insurance Corporation premiums and Canadian Dairy Commission levies. Provincial taxes include (personal and commercial) motor vehicle license fees, land transfer taxes and capital taxes. Local taxes include real property taxes, developer's lot levies and deed transfer taxes.

MNP analysed revenues for each of the fees/taxes included in the "Indirect Taxes on Production" category to separate the municipal proportion. MNP estimated that municipal taxes are approximately 39% of the "Indirect Tax on Production" multiplier. The estimated ratio was then applied to the multiplier to calculate and report on municipal tax revenue.

¹²³ Automotive Industry Update: Opportunities Abound, Automotive Communities Partnership, 2009.

APPENDIX E – ABOUT MNP

MNP is the fastest growing chartered accountancy and business advisory firm in Canada. Founded in 1945, MNP has grown from a single office in Manitoba to more than 75 offices and 3,000 team members across Canada. MNP is a member of Praxity AISBL, a global alliance of independent firms, which enables us to access a broad range of industry specific expertise worldwide.



At MNP, our professionals are the driving force behind our success. They continue to demonstrate our culture and values which is integral to the way we conduct business, both internally and externally. As such, MNP is proud to be recognized for the third year in a row as one of the 50 Best Employers in Canada by Maclean's magazine.

MNP provides a wide range of accounting, finance and business advisory services to clients. These include:

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- Enterprise Risk Services
- Consulting
- Succession
- Taxation
- Mergers and Acquisitions
- Forensic Accounting
- Insolvency and Corporate Recovery
- Valuations and Litigation Support

